Headquarters 1St Armored Division Unit 24309 APO AE 09052 May 2004

\*1ST ARMORED DIVISION Pam 385-1

Safety Program

FOR THE COMMANDER:

JACKSON L. FLAKE, III

Colonel, GS Chief of Staff

Official:

DENNIS E. SLACTER Lieutenant Colonel, GS Assistant Chief of Staff, G1

Summary. This pamphlet establishes safety policies and procedures for the implementation of the 1st Armored Division safety program Applicability. This pamphlet applies to all active duty, reserve components, and civilian employees assigned or attached to the 1st Armored Division.

Interim Changes. Interim changes to this pamphlet are not official unless authenticated by the Assistant Chief of Staff, G-1, 1st Armored Division. Interim changes will be destroyed on their expiration dates unless sooner superceded or rescinded.

Suggested Improvements. The proponent agency for this pamphlet is the 1st Armored Division Safety Office. Users are invited to send comments/suggested improvements on DA Form 2028 (Recommended Changes to Publications) to Commander, 1st Armored Division, Unit 24309. ATTN: AETV-THZ-DS, APO AE 09096.

### DEPARTMENT OF THE ARMY HEADQUARTERS, 1<sup>st</sup> ARMORED DIVISION UNIT 24309 APO AE 09252

1<sup>ST</sup> ARMORED DIVISION 01 JANUARY 2004 Standard Operating Procedures

#### SAFETY PROGRAM

- **1. PURPOSE:** This Standard Operating Procedure (SOP) establishes policy for implementing the 1<sup>st</sup> Armored Division Safety Program. It is meant as a tool to assist commanders and safety personnel in the development and execution of their safety programs.
- 2. REFERENCES: See Annex A.
- **3. SCOPE:** This SOP is applicable to all units assigned or attached to 1<sup>st</sup> Armored Division. This SOP is not all-inclusive.

### PART I GENERAL ADMINISTRATION

- **1. POLICY:** It is the policy within 1<sup>st</sup> Armored Division (1 AD) to:
- a. Reduce and keep to a minimum, accidental manpower and monetary losses, thus providing more efficient use of resources and advancing the Divisions combat effectiveness.
- b. Provide a safe and healthful environment at all times for all 1 AD personnel and personnel under 1 AD operational control, and others exposed to 1 AD operations and activities.
- c. Have all personnel under the operational control of 1 AD comply with safety regulations, occupational safety and health standards, and other pertinent safety directives and orders.
  - d. Keep accidental losses to a minimum by training to and enforcing published standards.
- e. Apply risk management procedures to all 1 AD operations and activities in and out of sector.

### 2. GENERAL RESPONSIBILITIES

- a. The Commanding General is the 1 AD Safety Officer. He is responsible for the safety and welfare of all personnel under his command and for the safe, efficient, use of all equipment and property under his control.
- b. The Command Sergeant Major (CSM) is the 1 AD Safety NCO. He is responsible for the safety and welfare of all soldiers in 1 AD, and for the safe, efficient use of all equipment and property in 1 AD.

- c. The 1 AD Safety Manager is responsible for developing, implementing, and managing the 1 AD Safety Program, and for discharging this responsibility IAW Army regulations, NATO standards, and Host Nation requirements in and out of sector.
- d. Commanders of subordinate commands will implement and manage their safety programs by this SOP.
  - e. Commanders down to battalion level are responsible for:
    - (1) Establishing a safety and health program.
    - (2) Publishing a safety program SOP or including the safety program in a unit SOP.
- (3) Establishing a quarterly safety committee in accordance with AR 385-10 and DA Pam 385-1.
- (4) Verifying that safety officers down to company and detachment level and alternates are appointed on orders; have been trained; have been briefed on their duties; and granted sufficient authority and time to properly execute those duties.
- (5) Establishing procedures for the prompt investigation, correct preparation, and timely forwarding of accident reports and other supplemental data required by regulation within time limits established in Part VII of this SOP, AR 385-40 and DA PAM 385-40.
- (6) Reviewing and recommending policy for Army Motor Vehicle (AMV) training and licensing programs.
- (7) Establishing a safety orientation program to ensure military personnel, Department of the Army Civilians (DACs), and family members receive information sufficient for them to understand and accept their accident prevention responsibilities.
  - (8) Implementing a safety awards program.
- (9) Ensuring that safety is part of the Command Inspection program of each subordinate unit, and requiring the unit to maintain reports from two previous inspections for review by higher headquarters.
- (10) Ensuring that all appointed Safety Officers/NCOs maintain a Safety Continuity Book or filing system. Items such as safety survey reports, responses to applicable annexes of this regulation, orders for all safety related personnel, safety policy letters, radiation inventory, hazardous material inventory, and a unit safety SOP, or safety program portion of another unit SOP, will be contained in/with the Safety Continuity Book.
- (11) Maintaining and verifying that all assigned units maintain or have readily available the minimum safety reference library as required by Annex A of this SOP.
- (12) Forwarding a copy of Brigade or separate brigade headquarters safety council minutes to HQ, 1<sup>st</sup> Armored Division ATTN: AETV-S, Unit 24309, APO AE 09252 and retain a copy, on file, for 2 years.
- (13) Implementing a risk management program IAW USAREUR Pam 385-15 and FM 100-14.
  - (14) Correcting unsafe and unhealthful working conditions.
  - (15) Meeting the requirements spelled out elsewhere in this SOP.

- (16) Publishing a safety philosophy documented in a SOP, memorandum, or METL vision statement.
  - f. The individual soldier and/or civilian employee is responsible for:
    - (1) Complying with all applicable safety regulations, rules, laws, and SOPs.
    - (2) Reporting unsafe conditions.
    - (3) Reporting all accidents.
    - (4) Wearing protective clothing and equipment when required.
    - (5) Warning others of known hazards or their failure to observe safety rules.

#### 3. SAFETY COUNCILS

- a. 1 AD Command Safety Council meeting is held semiannually. The council membership is made up of the Division command group and all Brigade Commanders to include separate brigades and Special Troops Battalion (STB). The Commanding General or Deputy Commanding General will chair the council.
- b. A 1 AD Aviation Safety and Standardization Council is held semi-annually in accordance with Part XVI this SOP. The Commanding General or the Deputy Commanding General will chair the council.
- c. Minutes of the Division Safety Council and Aviation Safety and Standardization Council meetings will be completed and copies furnished to all Brigade Commanders and 1 AD Safety Office.
- d. A Safety Professional Council is held semiannually. This council is made up of all Unit safety officers within the Division. The goal of this council is to maintain an effective safety program within the Division with all Units as contributing members and owners.
- e. All units, battalion level and higher will conduct quarterly safety council meetings. The council membership is at the discretion of the unit commander, but should contain, at a minimum, all commanders and 1SGs/CSMs, one level down and other key leaders. The battalion commander will chair the council. Minutes will be forwarded to the next higher headquarters.

### 4. SELECTION OF ADDITIONAL DUTY SAFETY PERSONNEL

- a. Safety officers are appointed for all units and organizations company/detachment level and above. At brigade the rank should be CPT or Warrant Officer, at battalion the rank should be LT or SFC and at company/detachment the Safety NCO will be SSG or above. Safety Officers and NCOs must have at least one year remaining on their tour with the unit appointing them to this duty.
- b. The minimum standard for training is that the unit safety officer or NCO must complete the USAREUR Safety Officer Course 40 hours (SOC 40) Course at Vilseck within 90 days of appointment. (USAREUR Pamphlet 350-205).

- **5. SAFETY PROGRAM DOCUMENTS** Regulations and SOPs that direct safety officers will review the safety program annually. They will be updated and approved by the commander annually or whenever a new commander assumes command. Separate SOPs are not required if the subject is included in appropriate sections of other unit SOPs. Separate unit SOPs should not repeat what is in this SOP but rather supplement it. Separate SOPs that repeat requirements laid out in regulations or this SOP are discouraged.
- **6. UNIT SUPPLEMENTS** Local supplementing of this SOP is permitted and highly recommended. Annex I through L are reserved for units to post their supplements as necessary. All supplements must be more stringent than the requirements of this SOP. If supplements are made, commanders will furnish one copy to Commander, HQ 1 AD, ATTN: AETV-S, Unit 24309, APO AE 09252.

### 7. SAFETY AWARENESS

- a. Safety days are held twice a year with the first prior to Memorial Day and the second prior to Thanksgiving. The focus is on safety and leadership involvement. Unit commanders will emphasize water safety hazards prior to the summer months. This may be done during the spring safety day activities and mentioned again prior to the Memorial Day holiday. Aviation units will conduct a standdown day as laid out in Part XVI, paragraph 4.i. this SOP.
- b. Holiday safety memorandums are published by the Division Headquarters and signed by the CG with specific guidance in the Division policy for a specific holiday. Units subordinate to the Division are not required to develop their own holiday safety memorandums. The holiday memorandums are sent out for the following holidays:
  - (1) Memorial Day Weekend.
  - (2) Fourth of July Weekend.
  - (3) Labor Day Weekend.
  - (4) Thanksgiving Holiday.
  - (5) Winter Holiday Season (December/January).
- c. Visual POV inspections will be accomplished at least twice a year in addition to the annual inspection done to renew the vehicle license plates. Unit leadership will conduct the inspections. The most appropriate holidays are Memorial Day and Thanksgiving Day.

### PART II SAFETY RISK MANAGEMENT PROGRAM

- 1. GENERAL Risk Management is a five-step process, which starts in the planning phase of the mission. The G3s/S3s are responsible for integrating risk management procedures into every operation. The process begins in the planning phase of a mission and continues throughout mission execution through the development and application of risk management procedures down to the lowest levels of leadership and ends with the after action review process. The use of the risk management process enhances mission accomplishment and improves the overall force protection effort.
- 2. THE FIVE-STEP RISK MANAGEMENT PROCESS is governed by four basic rules:
  - a. Rule 1. Integrate risk management into the early stages of the planning process.
  - b. Rule 2. Accept no unnecessary risks.

- c. Rule 3. Make risk decisions at the proper level.
- d. Rule 4. Accept risks only if the benefits outweigh the potential cost.

### 3. RESPONSIBILITIES WITHIN THE RISK MANAGEMENT PROCESS

### a. Commanders:

- (1) Ensure battle operating systems function to standard in order to prevent human error, material failures, and reduce adverse environmental effects.
  - (2) Establish risk management policy with realistic objectives and priorities.
  - (3) Ensure integration of risk management into plans and execution of all operations.
  - (4) Make risk decisions at the appropriate level, para 8 this Part.
  - (5) Select and enforce control measures for the most severe and probable hazards.
  - (6) Evaluate the effects of control measures in reducing risks.
- (7) Determine effectiveness of control measures and make necessary changes to guidance and controls. Ensure these changes are fed back to subordinates as guidance for future missions and SOPs.

### b. Headquarters Staff will:

- (1) G3/S3: Monitor capability of each battle operating system to control risk. Advise commander of any below-standard status that could affect the safety of the force. Develop an overall operational risk assessment.
  - (2) Safety Office: Develop input for commander's risk management policy and guidance.
- (3) G1/S1, G2/S2, G3/S3, G4/S4, G5/S5, G6/S6, and special staff: Coordinate risk assessments for each course of action (COA) in the tactical decision making process and provide these to subordinate units as necessary. Coordinate risk management training.
  - (4) Provide support needed to meet operational requirements.
- (5) Ensure procedures and standards are clear and practical for each specified and implied task.
- (6) Identify risk management shortcomings in battlefield operating system functions and develop control measures.
- (7) Apply risk management to the tactical decision making process. Develop and implement controls for the commander that support the mission and protect the force from unnecessary risks and loss of combat power.
  - c. Unit Safety Officer/NCO or civilian safety professional:
    - (1) Assist unit personnel in the conduct of risk management.
    - (2) Conduct training in the practice of risk management.

- (3) Review risk management applications for lessons learned and improvements.
- e. Leaders/Supervisors:
  - (1) Enforce performance to standard.
  - (2) Execute and enforce control measures selected by commander.
  - (3) Provide feedback on the effectiveness of controls.
  - (4) Apply risk management to planning and execution of specified and implied tasks.

#### f. Individuals:

- (1) Understand and implement risk management control measures as directed by the chain of command.
  - (2) Report the effectiveness of control measures during after action reviews.
  - g. Division Safety Office:
- (1) Develop and distribute policy and procedures for application of risk management within 1 AD.
  - (2) Provide Risk Management train-the-trainer courses to unit personnel upon request.
- (3) Assist commanders, leaders, safety officers/NCO and safety professionals with the implementation of a risk management program.

### **4. EXECUTION** The five steps of risk management are:

- a. Step 1 Identify hazards in major events: This step occurs during the earliest planning phase of an operation and is an integral function in the overall planning process. Hazards must be identified for each course of action in the tactical decision making process. Determine the mission essential tasks required to accomplish the mission and list the hazards that have been identified on the worksheet at Annex B this SOP. Commanders and staffs use risk management procedures to identify all hazards associated with required tasks. The areas of METT-T may prove helpful in organizing this identification process.
- b. Step 2 Assess Hazards: Determine the level of risk involved in each task by looking at the guidelines at para 7 this Part. This demonstrates the probability of an accident occurrence and the severity of the result if it occurs. With this information you can complete the risk assessments for each course of action by assessing the probability and severity of each hazard. Analyze all the effects of variables on the operation to include such things as weather and equipment availability. Annotate the risk on the worksheet.
- c. Step 3 Develop Controls & Make Risk Decisions: Whenever risks cannot be eliminated, leaders will control them by developing and using control measures. A control measure is developed for each hazard to enhance mission accomplishment and avoid unnecessary safety restrictions that will overburden the plan making it impossible to complete the mission. List all control measures on the worksheet. Make risk decisions for the selected COAs and accept the risk level or elevate the risk decision to the proper levels, see paragraph 8 this Part.
- d. Step 4 Implement Controls: Choose the best control measures to reduce the risk potential to an acceptable level. Refine the approved control measures and integrate them into the appropriate paragraphs of the operation order, overlays, and execution directives. Implement

control measures during mission execution. List the residual risk and any remarks on the worksheet.

- e. Step 5 Supervise and Evaluate: Evaluate the effectiveness of the control measures. Eliminate, modify and/or adjust control measures as necessary to meet changing situations. Capture and disseminate lessons learned from mishaps and near mishaps for future use. This information will be useful in evaluating the overall mission and in the development of future operational plans.
- **5. TYPES OF RISK ASSESSMENTS** The deliberate risk assessment worksheet at Annex B works you through the process. The deliberate risk assessment is used early in the planning stages of a mission. It is continually reviewed and changed as the mission planning evolves.
- **6. RISK ASSESSMENT WORKSHEETS** Annex B has the example of the 1 AD deliberate risk management worksheet used to formulate control measures for selected courses of action during the planning phase of the operation. In the first three columns, mission tasks and their associated hazards are identified and the base risk levels are determined. In the next two columns, control measures are identified and the residual risks (the resultant level of risk after the application of control measures) are determined in accordance with the standard army definitions of risk probability and effect. Once this worksheet has been completed the commander and staff will be able to determine the overall risk level for the entire operation and defer risk management decisions to the proper level of command (see para 8 this Part). The overall risk level is the same as the highest residual risk for any single task. An example form is at Annex B.
- **7. RISK CODE MATRIX.** Force Protection requires that each leader and soldier know and use the five steps and four rules of risk management. Nothing we do is so important that we can afford to accept unnecessary risks or a mission that is impossible to accomplish.
- a. Identify each task and the hazards associated with that task. Go to the Risk Assessment Code Matrix. At the matrix, identify what the severity effect of the hazards is for that task in the left column. Identify the Hazard Probably in the top row. The intersection of the Severity column and Probability Row will be the initial risk to be annotated on the risk assessment worksheet.

Risk Assessment Code Matrix

	HAZARD PROBABILITY				
SEVERITY	FREQUENT A	LIKELY B	OCCASIONAL C	SELDOM D	UNLIKELY E
CATASTROPHIC I	EXTREMELY HIGH	EXTREMELY HIGH	HIGH	HIGH	MODERATE
CRITICAL II	EXTREMELY HIGH	HIGH	HIGH	MODERATE	LOW
MODERATE III	HIGH	MODERATE	MODERATE	LOW	LOW
NEGLIGIBLE IV	MODERATE	LOW	LOW	LOW	LOW

b. Standard definitions to assist in determining the severity and hazard probability.

### (1) RISK LEVELS

- (a) EXTREMELY HIGH RISK Loss of ability to accomplish mission.
- (b) HIGH RISK Significantly degrades mission capabilities in terms of required mission standards.
- (c) MODERATE RISK Degrades mission capabilities in terms of required mission standards.
  - (d) LOW RISK Little or no impact on accomplishing the mission.

### (2) SEVERITY

- (a) CATASTROPHIC Death or permanent total disability, system loss, or major property damage.
- (b) CRITICAL Permanent partial disability, temporary total disability in excess of three months, major system damage, significant property damage.
- (c) MODERATE Minor injury, lost workday accident, compensable injury or illness, minor system damage, minor property damage.
- (d) NEGLIGIBLE First aid or minor supportive medical treatment, minor system impairment.

### (3) PROBABILITY

- (a) FREQUENT; Occurs often, continuously experienced.
- (b) LIKELY; Occurs several times.
- (c) OCCASIONAL; Occurs sporadically.
- (d) SELDOM; Unlikely, but could occur at some time.
- (e) UNLIKELY; Can assume it will not occur.

### 8. RISK ACCEPTANCE MATRIX

- a. The unit staff assists the commander through the presentation of possible control measures to reduce or eliminate risks.
- b. Once the residual risks have been determined through the application of control measures the risk decision must be presented at the proper level of command for the final risk decision on mission execution.

#### **RISK ACCEPTANCE MATRIX**

RISK	DIVISION	BRIGADE	BATTALION	COMPANY	PLATOON
			_	_	_
EXTREMELY HIGH	CORPS	DIVISION	DIVISION	BRIGADE	BRIGADE
HIGH	CORPS	DIVISION	BRIGADE	BRIGADE	BATTALION
MODERATE	DIVISION	BRIGADE	BATTALION	BATTALION	COMPANY
LOW	DIVISION	BRIGADE	BATTALION	COMPANY	PLATOON

c. This table indicates the proper levels of risk decision. The size of the unit required to execute the mission is indicated on the top line of the matrix with the residual risk level shown in the left column. The proper level of command for the associated risk is found at the intersection of the mission complexity and risk columns. The Division Commander can approve Low and Moderate overall residual accident risk missions. The V Corps' headquarters will approve High and Extremely High missions.

# 9. SPECIFIC INSTRUCTIONS FOR COMPLETION OF THE DELIBERATE RISK ASSESSMENT WORKSHEET

- a. The examples at Annex B illustrate the matrix style worksheet to be utilized to conduct an in depth risk analysis of each mission. This worksheet has been tested and proven effective during Division training exercises in preparation for the peacekeeping deployment to the Bosnian AOR. The worksheet is intended to identify all the risks associated with the mission and to provide stimulus to the planners and commanders in evaluating the severity of each task associated with mission accomplishment.
- b. Upon completion of the hazard identification phase, commanders and planners should identify the required control measures to reduce or eliminate risk, and incorporate the results into appropriate mission directives. Additionally, planners should be able to integrate the identified control measures developed to minimize risks into a METT-T oriented mission analysis. Identified tasks, hazards, and control measures can then be staffed for presentation to the Commander in the form of a course of action decision brief, OPLAN/OPORD brief, or a hasty brief based upon a format utilizing METT-T factors, as required.
  - c. Instructions for use (refer to examples in Annex B):
    - (1) Prepare a worksheet for each phase/sub-phase of the mission.
    - (2) Blocks 1 thru 4 are self-explanatory.

- (3) Block 5 Hazards. ID hazards by reviewing METT-TC facts for this mission/task. Sources of METT-T facts & historical hazards include: mission/task instructions, recon, experience of leaders & troops, unit safety SOP, & unit accident history. Objective is to ID hazards most likely to result in accidental injury or property damage. Enter hazards in Block 5.
- (4) Block 6 Initial Risk Level. Determine risk of each hazard by applying the risk assessment matrix on page 8 this SOP. In Block 6 enter the risk level for each hazard (i.e., L Low, M Moderate, H High, or E Extremely High).
- (5) Block 7 Controls. Develop one or more controls for each hazard to reduce its risk. As needed, specify who, what, where, when, and how for each control. Use sources listed in Block 5. Enter controls in Block 7.
- (6) Block 8 Residual Risk Level. For each hazard, determine the level of risk remaining after controls are implemented (use the risk assessment matrix on page 8). Enter the residual risk for each hazard in Block 8.
- (7) Block 9 Overall Risk Level. Determine the overall risk of the mission/task by using the hazard with the highest residual risk. Circle the risk level in Block 9 at bottom of worksheet.
- (8) Block 10 Risk Decision Authority. Decide to accept or not accept the level of residual risk for this mission/task. Enter in Block 10 (bottom of worksheet) the appropriate risk decision authority for the risk level circled in block 9. Use the Risk Acceptance Matrix on page 9 this SOP.
- (9) Block 11 How to Implement. Decide how each control will be put into effect/communicated to the personnel who will make it happen (e.g., written/verbal instructions, tactical/safety/garrison SOPs, rehearsals). Enter in Block 11.
- (10) Block 12 How to Supervise. Show how each control will be monitored to ensure proper implementation (e.g., continuous supervision, spot checks). Enter in Block 12.
- (11) Block 13 Controls Effective. After mission/task is complete, determine effectiveness of each control in reducing the risk of the targeted hazard. In Block 13 enter "yes" if effective, "no" if not effective. For those not effective, determine why and what to do the next time this hazard is identified. For example, change the control, develop a different control, or change how the control will be implemented/supervised.

### PART III WATER SAFETY PROGRAM

### 1. TACTICAL OVERWATER OPERATIONS

- a. USAREUR Regulation 385-4 provides tactical overwater operations safety standards for shallow water fording, amphibious vehicle swimming, rafting and bridging, and assault boat operations.
- b. Planning is critical to the success of overwater operations. Each commander will have a written plan specific to the unit and operations before beginning tactical overwater operations.
- c. Safety staff members and mission planners will prepare risk analyses of overwater operations. When safety standards in USAREUR Regulation 385-4 must be modified, commanders will request approval from the chain of command up to the division or equivalent level.
- d. USAREUR Regulation 385-4, Appendix A provides emergency support and uniform standards.

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e. Commanders of organizations that have overwater operations in their Mission Essential Task List (METL) will train (drown proofing) their soldiers in accordance with Training Circular 21-21.

#### 2. RECREATIONAL WATER SAFETY OPERATIONS

- a. Unit commanders will emphasize water safety hazards prior to the summer months. This may be done during the spring safety day activities and mentioned again prior to the Memorial Day holiday.
- b. Unit commanders will obtain a list of authorized swimming areas from the Base Support Battalion (BSB) commander. Unit personnel will be briefed on this list and it will be posted on the unit bulletin board from May thru September of each year. IAW USAREUR Reg 385-2, BSB commanders will complete the list by 1 May.
  - c. Personnel will not swim in areas that do not have a lifeguard present.
  - d. Personnel will not consume alcoholic beverages prior to water activities.
- e. Personal flotation devices will be worn by weak or non-swimmers and by all personnel riding in a boat.

### PART IV WEAPONS SAFETY

- a. Commanders will validate all soldiers on weapons proficiency prior to weapons card issuance.
- b. All units will conduct comprehensive preliminary marksmanship training (PMI) prior to range qualification.
  - c. The Rules of Engagement (ROE) at Annex K, Appendix K-1 are in effect.
  - d. Utilize the weapons status document at Annex K, Appendix K-2.
  - e. Construct weapon clearing barrels IAW Annex K, Appendix K-3.
  - f. Post weapon clearing procedures next to clearing barrels IAW Annex K, Appendix K-4.
- g. Commanders will place clearing barrels appropriately as dictated by mission requirements. Soldiers must utilize these barrels in central region so that they are familiar with the procedures when they deploy.
- h. The two-person rule will apply when clearing weapons systems at the clearing barrels. The first line supervisor will observe the clearing procedures. In the absence of a first line supervisor, the senior person will observe the clearing procedures. The senior person will clear the weapons system in the presence of another individual.
- i. Report all accidental weapon discharges involving live ammunition with an SIR through the chain of command.
- j. Battalion Commanders will initiate a commander's inquiry on all accidental weapon discharges. Lessons Learned will be forwarded to the 1 AD Safety Office. All accidental weapon discharges involving blank ammunition will be reported to the 1 AD Safety Office NLT 10 days after occurrence using the reporting format at Annex C.

### PART V AMMUNITION/EXPLOSIVE SAFETY PROGRAM

### 1. GENERAL

- a. Commanders will limit the number and exposure of personnel working near explosives and ammunition.
  - b. Flame-producing emergency signals are prohibited on any vehicle carrying explosives.
- c. Matches, lighters, and other fire-, flame-, or spark-producing devices are not permitted in areas containing ammunition or explosives.
- d. Installation of perimeter defense ammunition items (for example, Claymore mines, trip flares) at ammunition storage sites is prohibited unless specifically authorized.
- e. Incendiary devices required for destroying classified material will be stored in dry, fire-retardant buildings and rooms that can be locked to prevent tampering.
  - f. No attempt will be made to fight fires when ammunition is engulfed in flames.
  - g. Only guards authorized by their commander will use or carry live ammunition.
- h. Horseplay with weapons, pyrotechnics, ammunition, and explosives is prohibited. NCOs will set and enforce standards for handling these items.
  - i. Treat all weapons as if they are loaded with live ammunition at all times.
  - j. Do not give training ammunition, fired or unfired, to nonmilitary personnel.
- k. Loaded weapons will not be transported on vehicles or carried by soldiers in uncontrolled areas. In training, soldiers will not point weapons at anyone. Fire weapons only at designated firing ranges. Individual soldiers will control and secure weapons at all times.
- I. **Return** all types of unfired or excess ammunition to the ASP IAW ASP turn-in procedures. <u>Unused</u> ammunition will not be initiated in place to avoid turn-in the turn-in process. I.e., HC smoke pots, Flares, CS.
- **2. AMMUNITION, SIMULATORS, PYROTECHNICS, AND CHEMICALS** The use of blank ammunition, simulators, pyrotechnics, and chemicals in training is subject to the following restrictions:
  - a. Blank Ammunition.
- (1) Blank and live ammunition will not be issued at the same time to any person participating in a training exercise.
- (2) Secure the blank firing adapter or attachment on the weapon muzzle when firing blank ammunition during force-on-force training.
- (3) Do not fire small caliber (cal) (5.56 millimeter (mm), 7.62 mm, and 50 cal) blank ammunition within 20 meters of unprotected personnel. This distance may be reduced to 5 meters when exposed personnel are wearing approved eye protection (ballistic laser protective spectacles (B-LPSs)).
  - b. Simulators. Personnel will:

- (1) Follow the detailed instructions for use and the safety precautions provided with each simulator.
- (2) Observe the minimum safety distances printed on the package or simulator. Do not detonate hand-held (hand grenade and artillery) simulators within 25 meters of unprotected personnel, vehicles, or buildings (excluding military operations on urbanized terrain (MOUT) facilities).
- (3) Not throw simulators directly at people, tents, or vehicles. The fragment hazard distance for M115A2 simulators is 25 meters. Only designated and authorized personnel may use M115A2 simulators. Personnel in charge of using the device must be thoroughly trained.
- (4) Not place hand-held simulators on armored personnel vehicles. A high surface temperature could ignite simulators.
- (5) Guard emplaced booby trap simulators to prevent people from approaching within 2 meters. These simulators will not be abandoned under any circumstance.
- (6) Not fire M1 tank main gun simulators (Hoffman device) within 50 meters of people or within 150 meters of buildings (excluding MOUT facilities), aircraft, or flammable materials. The Hoffman device must be loaded, reloaded, or unloaded with the device in the loading position and the key removed.

### (7) Misfire Procedure:

- (a) Wait at least 30 minutes after expected burn time before investigating the reason for misfire. Simulators that fail to function are extremely hazardous.
- (b) Mark the location of the unexploded ordinance (UXO), and leave the area and call EOD.
  - (c) Never tamper with, modify, open a simulator, or attempt to burn the contents.

#### c. Pyrotechnics.

- (1) Use pyrotechnics only for the purpose for which they are designed.
- (2) **NEVER** fire signal flares at people, tents, vehicles, or aircraft.
- (3) Do not arm hand-held pyrotechnics before use. They will be fired IAW with the operator's manual.

### d. Duds and Discarded Munitions.

- (1) After training, the OIC will collect all non-expended munitions before soldiers leave the maneuver area. Possession of blank or live ammunition, simulators, or pyrotechnics is prohibited in billets and work areas.
- (2) Instruct soldiers not to touch or move duds or discarded munitions. Locations of duds will be reported through the chain of command and to range control if the training occurs on an range complex. The supporting explosive ordnance disposal unit will be called for support.
- e. Riot Control Agents (RCAs) and HC Smoke pots. The use of RCAs and HC Smoke pots authorized for training purposes is subject to the following guidance:

- (1) The same protective cover and boundary limits observed during training with high explosive ammunition (AR 385-63 and USAREUR Suppl 1) are required to protect against fragments and ricochet of RCA ammunitions.
- (2) Commanders will consult school-trained nuclear, biological, and chemical (NBC) officers or NCOs before using RCAs or NBC Defense training aids.
- (3) Training with NBC Defense simulants, RCAs, or smoke in USAREUR will be restricted to U.S.-controlled training areas and mask-confidence chambers.
- (4) When using NBC Defense stimulants in training, commanders will consider wind and other meteorological conditions (i.e., Temperature Inversion), distance factors, the surrounding community, and the quantity of munitions to be used. Commanders responsible for NBC Defense exercises will coordinate properly with other units and with local or regional authorities (for example, county administrator, mayor, military or local police, and forestry official) and take precautions to ensure the civilian and uninvolved military population will not be affected.
- (5) Before releasing NBC Defense stimulants, RCAs, or smoke munitions in training agents in an open area, the exercise commander will inspect the area to ensure only appropriate military personnel are in the area to be affected by the agent. Military personnel and units in the area who are not participating in the training will be warned before the exercise begins.
- (6) The commander of personnel taking part in training with RCAs or smoke must get a medical clearance for persons whose health or physical profile indicates participation may be injurious. As a minimum, persons with a P3 profile, because of respiratory or cardiac conditions, will be evaluated at a medical facility.
- (7) A school-trained NBC officer or NCO will supervise mask-confidence training. During mask-confidence exercises, medical support will be present (incl. personnel trained in emergency care of chemical casualties and a vehicle for emergency evacuation).
- (8) Firing projectiles or dropping bombs containing simulants that may be harmful to the environment or wildlife on land or in bodies of water is prohibited.
- (9) At USAREUR major training areas (MTAs), the Commander, 7ATC, will determine the safe distance for using RCAs and smoke.
- (10) NBC Defense stimulants listed in appropriate FMs may be used to train personnel in detecting and identifying toxic chemicals.
- f. CS Riot-Control Agents. In addition to guidance given in 2.e. above commanders using CS riot-control agents in training will observe the following restrictions:
- (1) In USAREUR, use of CS riot-control agents will meet environmental restrictions outlined in AR 200-1 and USAREUR Regulation 200-1. CS causes foliage damage and remains in the soil, adversely affecting germination.
- (2) CS agents may be used in open local training areas if the agent source is 1000 meters from the nearest community, road, or highway. These agents will be used far enough from roads and inhabited areas that a change of wind direction will not carry the chemicals into these areas.
- (3) When using CS in the open, no more than two grenades will be used at once. Additional grenades will not be ignited until previously detonated grenades have stopped functioning.
  - (4) Do not use large CS dispensers (such as CS-1 drums) in V Corps.

- (5) Only CS in capsule form will be used in CS chambers.
- (6) The protective mask and field clothing, with collar and cuffs buttoned and trouser legs tucked into combat boots, will be worn for protection from field concentrations of CS.
  - (7) Personnel adversely affected by CS should be
    - (a) Placed in fresh air facing into the wind for 5 to 10 minutes.
    - (b) Placed away from other affected personnel.
    - (c) Instructed to avoid rubbing their eyes.
- (8) If major accidental contamination with CS occurs, soldiers will be decontaminated as follows:
  - (a) Promptly flush bodies with large amounts of water.
- (b) While protecting the eyes, wash with a 5-percent sodium bisulphite solution to remove the CS agent from the body. If sodium bisulphite is not available, a 1-percent solution of sodium carbonate, sodium bicarbonate, or yellow Government-issue soap and water may be used.
- (c) For showering after exposure to CS, flush the soldier's body with water for 3 to 5 minutes before normal showering. If agent residue is on the clothing, remove the clothing to prevent unmasked personnel from being affected.
- g. Smoke Agents. In addition to the guidance given in 2.e. above, commanders will observe the following restrictions.
  - (1) Do not use white phosphorous smoke grenades for training in 1 AD.
- (2) Commanders of units planning to use smoke-producing munitions or devices in training, except for colored signaling smoke, will notify other nearby units.
- (3) When using smoke in training areas, commanders must take special care to ensure appropriate protection is provided to people who are likely to be exposed. Specific consideration will be given to weather conditions (i.e., temperature inversion) and the potential downwind effects of the smoke.
- (4) Before scheduling smoke operations in the general area of major highways, railways, or water traffic arteries, commanders will coordinate with local HN authorities to obtain clearance. The responsible commander will ensure precautions are taken to minimize interference with all types of traffic. Patrols, guards, and warning signs will be posted, as necessary, to give adequate warning to personnel in the area.
- (5) Soldiers will carry protective masks when participating in an exercise that includes the use of smoke.
- (6) Soldiers will put on masks before being exposed to any concentration of smoke produced by hexachloroethane (HC) smoke grenades, or HC smoke pots, or metallic powder. Additionally, personnel will put on masks when
- (a) Passing through or operating in dense smoke (visibility less than 50 meters), such as smoke blankets and smoke curtains.

- (b) Operating in or passing through a smoke haze (visibility greater than 50 meters) when the exposure will last more than 4 hours.
- (c) Exposure to smoke produces breathing difficulty, eye irritation, or discomfort. Such effects in one person will serve as a signal for all similarly exposed personnel to put on masks.
- (d) Conducting MOUT training in enclosed spaces. The protective mask is not effective in oxygen-deficient atmospheres. Care must be taken not to enter confined space where oxygen may have been displaced by smoke.
- (e) Operating smoke generator equipment if the operator cannot be positioned upwind from smoke being generated.
  - (7) The following precautions will be observed when using HC smokepots:
- (a) HC smokepots will remain dry before use. Wet smokepots are subject to erratic burning or explosion or may produce spontaneous combustion.
- (b) The firer will be trained to keep his or her face turned away from the smokepot as much as possible during manual firing and to move quickly at least 30 meters from the smokepot after ignition. Because HC smokepots produce great heat when burning, precautions will be taken to prevent fires.
- (c) HC smokepots will not be fired inside buildings, tents, or other enclosed areas because of fire and health hazards from the fumes.
- (8) When grenades are used in training, care will be taken to prevent grass and forest fires. Grenades will not be activated within 10 meters of people and **will not** be used for mask-confidence exercises or in confined areas or tents.

### NOTE: HC smoke can be harmful. Prolonged exposure to smoke can be fatal.

- h. Aircraft Sprays.
  - (1) The portable helicopter disperser may be used to spray chloracetophenoe in MTAs.
- (2) When agents are sprayed from low-flying Army aircraft, permanent injury to unprotected eyes and severe irritation of the skin of exposed personnel may occur. To prevent injuries, the following precautions will be taken:
- (a) Soldiers will be instructed not to look up unless their eyes are protected when planes are directly overhead or upwind.
- (b) Soldiers contaminated with liquid in a spray attack will remove clothing as soon as possible and will go to shower or washing facilities. Wash contaminated eyes immediately with fresh water for 15 minutes.
- (3) Do not conduct aircraft spraying operations within 1 kilometer of buildings, equipment, or non-participating soldiers.

### 3. TRANSPORTATION REQUIREMENTS

a. The UR 55-4, Joint Transportation of Hazardous Material (Draft) provides specific requirements for vehicles transporting explosives and ammunition.

- (1) All Drivers of vehicles loaded with ammunition or explosives will be HAZ-11 trained and licensed. EXCEPTION TO REQUIREMENT: Drivers transporting small arms ammunition, H/C and Division 1.4S are not required to have HAZ-11 certification.
- (2) Built-up vehicles not manufactured to military specifications (trucks or trailers with exterior shelters installed locally) will not be used to transport ammunition or explosives.
  - (3) Vehicle electrical systems will not exceed 24 volts.
- (4) When transporting all hazard classes of ammunition, two metal reflecting orange placards (NSN 9905-01-V40-0650) and two placard frames (NSN 9999-01-V40-0653) will be affixed to the front and rear of each vehicle no higher than 5 feet above road level. Placards are not required when transporting less than 75 kilogram (kg) (165 pounds) gross weight of hazard class 1.4 (small arms) items.
- (5) Trailers used to carry ammunition or explosives will be equipped either with brakes that may be operated from the driver's cab or with automatic brakes that lock when the trailer is detached from the towing vehicle. Only one trailer will be towed at a time. Two-wheeled trailers will be equipped with a rear support leg.
  - (6) Vehicles will:
- (a) Have a loading compartment with secure sides of sufficient height and strength to contain a load safely. The floor will not have openings. The floor and sides will be clean and free of protruding nails and other sharp objects.
- (b) Not have any operational deficiencies that could cause a brake, steering, or lighting failure.
  - (7) Before using vehicles, drivers will ensure:
    - (a) There are no deficiencies in the lighting or electrical system.
- (b) There are no leaks in the fuel (carburetor, line, pump, and tank), oil, or exhaust systems.
- (c) Daily preventive maintenance checks and services inspections and DD Form 626 (Motor Vehicle Inspection) have been completed.
  - (8) Required documentation for vehicles transporting ammunition or explosives includes:
- (a) DD Form 1384 (Transportation Control and Movement Document), DD Form 1348-1 (DOD Single Line Item Release/Receipt Document), DA Form 581 (Request for Issue and Turn-In of Ammunition), or other applicable document ordering movement.
  - (b) DD Form 626.
  - (c) DD Form 836 AE.
- (d) The appropriate AE 55-4-series forms describing hazard divisions and required safety measures. These forms will be in English and German. Forms are required by USAREUR Regulation 55-4 (Draft).
  - (e) Authorized route (strip map).

- (f) Emergency telephone numbers (may be listed on DD Form 836 AE or AE 55-4-series forms).
- b. Equipment Requirements. The following equipment is required for each vehicle transporting explosives or ammunition:
  - (1) Two 10-B-C fire extinguishers mounted on the vehicle.
  - (2) Enough tools to make minor repairs.
- (3) Two portable flashing amber warning lights with self-contained batteries in case of a breakdown.
  - (4) Two warning triangles.
  - (5) Two wheel chock blocks appropriate for the vehicle.
  - (6) A first-aid kit.
  - (7) Reflectorized vests for occupants.
- (8) A spare tire for each type of tire on vehicle or trailer and the necessary tools to change the tires.
- c. Wheeled vehicles will have wheel chains when operating at USAREUR MTAs from October through May when picking up ammunition or explosives. Chains also will be installed on wheels:
  - (1) When tank trail conditions are amber because of snow or ice.
  - (2) When advised by range control.
  - (3) According to the appropriate vehicle operators manual.

#### 4. TRANSPORTATION LOADING COMPATIBILITY

- a. Markings on individual packages or items approved by the U.S. Army and normally used in the United States are valid in Europe.
- b. Ammunition and explosives will not be combined for movement with flammable, oxidizing, corrosive, or combustible materials.
- c. USAREUR Regulation 55-4 (Draft) provides specific information on compatibility of items. Generally, loading is limited to materials within the same compatibility group.
- d. Loads will not be more than one pallet high. The height of pallets and loads will not exceed 54 inches.
- e. Primers may be loaded in the same vehicle as the propelling charges with which they are used **only during tactical movements**.
- f. Fuses, projectiles, primers, and propelling charges in approximately equal numbers to make complete rounds may be loaded on the same vehicle.

- g. Electro-explosive devices and ammunition containing electro-explosive devices may be transported only in original packaging or in closed-metal, small arms containers to protect against initiation by electromagnetic radiation hazards.
- **5. TRANSPORTATION LOAD STABILITY** Loads will be blocked and braced according to approved loading plans and diagrams to prevent movement during transport.

### 6. SAFETY IN TRANSIT

- a. According to approved loading plans and diagrams, vehicle crews will consist of a driver and an assistant driver. Both crew members will be properly licensed and certified to carry hazardous cargo.
  - b. Ammunition and explosives should not be transported on public highways after dark.
  - c. Vehicle drivers should avoid densely populated areas when transporting ammunition.
- d. Commanders will ensure unauthorized persons and persons suspected to be under the influence of drugs or alcohol do not approach or handle ammunition or explosives.
- e. No person is allowed to ride on or in the cargo compartment of a motor vehicle transporting ammunition and explosives.
- f. Vehicle operators will obey local traffic laws and drive safely according to road and weather conditions. Vehicles will not exceed 60 kilometers per hour (KPH) (37 miles per hour (mph)) on normal roads and 80 KPH (50 mph) on highways. The M939 series 5-ton vehicle will not exceed 64 KPH (40 mph) on highway and secondary roads, 56 KPH (35 mph) on cross country roads, 40 KPH (25 mph) on sand and snow, and 19 KPH (12 mph) on icy conditions.
- g. The distance between vehicles transporting ammunition and explosives should be at least 100 meters. Convoy commanders may order the distance between vehicles reduced in special circumstances, e.g. security, limited visibility, etc.
  - h. Stops should be made:
    - (1) Approximately every 2 hours to:
      - (a) Check the stability and security of a load.
      - (b) Avoid overheating the vehicle.
      - (c) Allow drivers to rest.
- (2) At least 300 meters from inhabited buildings and places of assembly. These stops will be made only where they are not hazardous to other vehicles.
- i. Temporary parking restrictions apply to vehicles transporting explosives and ammunition. These restrictions do not apply to overnight parking or download sites.
  - (1) Maintain at least 50 meters between parked vehicles carrying ammunition and explosives.
  - (2) Drivers will not leave vehicles unattended.
  - (3) Commanders will not allow smoking, fire, or open flames within 50 feet of vehicles.

- (4) Portable flashing amber lights should be placed about 100 meters in front of and behind stopped vehicles during darkness and bad weather. RAWLs will be used when available.
  - j. If a vehicle transporting ammunition or explosives breaks down, operators will:
- (1) Warn traffic by placing flashing amber lights 50 meters in front of and behind the vehicle and placing warning triangles 100 meters in front of and behind the vehicle. If on an expressway or a four-lane divided highway, operators will place both triangles to the rear at 200 and 300 meters. Distance may vary depending on conditions.
- (2) Move the vehicle to a safe area away from traffic lanes and at least 300 meters from inhabited buildings.
  - (3) Notify local HN police for required assistance.
  - (4) Not perform major repairs until a load has been transferred to a relief vehicle.
- (5) Contact the appropriate HN authority or commander of the unit nearest the operator's unit for a relief vehicle and work party, if required.
  - (6) Make minor repairs if there is no risk of fire or other hazard.

#### 7. FIRE PRECAUTIONS Commanders will ensure:

- a. There is no smoking, fire, or open flame in vehicles.
- b. Matches, lighters, and other flame-producing devices are not carried by the vehicle crew.
- c. Spare fuel is carried in 5-gallon fuel containers. The containers must be marked on the outside of the container with 1 inch tall letters in a color that sharply contrasts with the color of the can so that the letters are easily read. Containers will have leak proof gaskets on the caps and will be placed properly in holders on the outside of vehicles.
  - d. Engines are turned off during loading and unloading.
  - e. Vehicles are not refueled during loading and unloading.
  - f. Operators
    - (1) Secure radio antennas to prevent contact with high voltage lines.
- (2) Inspect vehicle heaters and fire extinguishers before and during ammunition upload to ensure proper operating order.
- (3) Ensure vehicles that have, or that are reported to have, unresolved short circuits or frayed wires are not operated.
- g. Vehicles carrying ammunition or explosives are not used as trailing escort vehicles in a convoy.
  - h. Detailed fire fighting procedures are in Chapter 3, DA PAM 385-64.
- **8. ACCIDENT PROCEDURES INVOLVING AMMUNITION VEHICLES** The driver or person in charge will do the following when a vehicle transporting ammunition and explosives is in an accident:

- a. Safeguard the load.
- b. Ensure traffic is warned.
- c. Direct care and evacuation of the injured.
- d. Keep spectators at a safe distance.
- e. Prevent smoking, use of matches, or open flames within 50 meters of the accident scene.
- f. Notify local police of the location of the accident, the type of load, and the extent of injuries or fire.
  - g. Notify the chain of command as soon as possible.
  - h. Ensure ammunition and explosives are not moved without proper authority.
- i. Annex F provides fire response procedures for vehicles involving depleted uranium (staballoy or DU) ammunition. This includes tanks with DU ammunition. The required actions can be found on DD Form 836 and AE 55-43 series forms.
- **9. BASIC LOAD UPLOADING SITE** During preparation for contingency operations, the upload of basic load ammunition may be required. The following provisions of DA Pam 385-64 apply. See Chapter 14 for specific guidance.
- a. Quantity-distance requirements will be met to protect exposed sites from damage by accidental explosions. Arrange ammunition and stacks of ammunition so no stack or group of vehicles exceeds 4,000 kg (net) of explosives weight.
- b. Keep explosive stack or a vehicle loaded with explosives must be kept at least 350 meters from the nearest inhabited building and at least 230 meters from the nearest public traffic route.
- **10. BASIC LOAD AMMUNITION HOLDING AREAS** For planning purposes, it is essential that Safety, Corp of Engineers and Quality Assurance Ammunition Specialists are included in the planning process for construction of Basic Load Ammunition Holding Areas or any project that involves storage or handling of explosives.
- 11. QUANITY-DISTANCE (Q-D) CALCULATIONS FOR UP-LOADED VEHICLE PARKING IAW DA Pam 385-64, Chapter 14, para 14-4 e and f. the total NEW/NEQ of ammunition up to 4000 kg is used for computing Quantity-Distance (Q-D) for a single loaded vehicle, combinations of two or more loaded vehicles, or single or combinations of uploaded light armored and heavy armored vehicles. See Risk Level Matrix for Ammo Basic Load Storage by Quantity Distance at ANNEX J.

#### 12. FIRE PREVENTION

- a. Vehicles and trailers loaded with explosives should be parked 250 ft. or more from vehicles and trailers transporting flammable liquids or cargo vehicles loaded and packaged gasoline, diesel fuel, and similar flammable liquids. Safety clearance may be reduced below 250 ft. but not less than 50 ft. when compliance is not possible due to area constraints.
- b. Do not park vehicles and trailers loaded with explosives in military facilities where vegetation fires may ignite them. Park and maintain vehicles and trailers in a way to allow rapid evacuation if a fire occurs.

- c. Post a fire plan for evacuation of combat loaded vehicles in a Basic Load Ammunition Holding Area (BLAHA). The plan will include provisions for quarterly fire drills for armored vehicle crews.
- d. When tactical situations permit, refueling operations for vehicles carrying ammunition should be delayed until the has cooled for at least 10 minutes to reduce the danger of automatic ignition from spills or overflow.

### 13. WAIVER PROCEDURES- UPLOAD/DOWNLOAD

- a. Contingency operations involving the uploading of ammunition on combat vehicles prior to deployment may require explosive safety waivers granted by the CG, USAREUR. The approval process is time consuming and approvals are not guaranteed.
- b. Detailed, advanced planning is required for this type of operation. Areas must be identified for the upload operation and for holding and staging these vehicles once they have been uploaded. These areas must come as close as possible to satisfying both US and Host Nation explosive safety criteria.
- c. The best way to deploy with uploaded vehicles is to identify upload, holding, and staging areas well in advance of deployment and to obtain prior waivers and approvals to be pulled off-the-shelf when needed. Since the precise nature of deployment is not always known months in advance, generic waivers and approvals should be prepared for a worst-case situation. The generic waiver can become effective upon approval of a campaign plan or OPORDER/OPLAN.
- d. The first step is for commanders to identify tentative uploading and staging areas based on a detailed risk assessment. The risk assessment must consider the maximum quantities and types of ammunition, the types of vehicles to be uploaded, the available separation distance between the upload or staging area and other activities, personnel exposed and the anticipated duration of the operation. The selected areas must be identified on 1:2,500 scale maps (available at Area Support Group (ASG) Director of Public Works (DPW). (See Risk Level Matrix for Ammo Basic Load Storage by Quantity Distance for determining risk level and Decision Authority for Explosives Risk at Annex J)
- e. Forward packages including risk assessments and appropriate map(s) through chain of command to 1 AD Safety, Unit 24309, APO AE 09252. The 1 AD Safety Office will evaluate the package and get it into the appropriate waiver or approval channel.
  - f. Basic load explosive safety separation distance criterion for blast is as follows:

### Minimum Explosive Safety Distances (METERS)

HEAVY ARMOR	INHABITED BUILDINGS	PUBLIC ROAD
Uploading Operations Involving M1 Tanks	244M	163M
Uploaded M1 Tanks	20M	20M
Uploading Operations Involving M2/M3 Bradley Fighting Vehicles (minus TOW n	20M nissiles)	20M

All, Including M2/M3
Bradley Fighting Vehicles
with TOW Missiles

381M 229M

This should be used as a guide in helping to identify upload areas, with every effort being made to meet these minimum distances. The 1 AD Safety Office is available to assist commanders in assessing the risks, evaluating the selected areas and preparing waiver requests when required.

- g. Deploying with uploaded combat vehicles should not be assumed to be the safest or most reliable method of deployment. Commanders should always be prepared to assess the risks of deploying uploaded against the mission benefits. The most reliable method of ensuring that serviceable ammunition and vehicles arrive at the point of expected use, intact and combat ready, is to transport each separately. Separate transport ensures that a single explosive accident will not catastrophically affect the total mission.
- **14. UPLOADED AIRCRAFT/PARKING** Detailed guidance for determining correct Q-D between aircraft loaded with explosives is in DA Pam 385-64, para 14-16; TM 5-803-7, Airfield and Heliport Planning and Design; FM 1-111, Aviation Brigade; and FM 10-67-1, Fuel Operations.
- **15. STORAGE OF CAPTURED ENEMY AMMUNITION** Detailed guidance for storage of captured enemy munitions is in DA Pam 385-64, para 13-8.
- **16. VEHICLES AND EQUIPMENT MAINTENANCE** Detailed guidance for vehicle and equipment maintenance is in DA Pam 385-64, para 14-6.
- **17**. **FORWARD AREA REARM/REFUEL POINTS (FARP)** Detailed guidance for FARPs is in DA Pam 385-64 para 14-15.
- 18. WEAPONS CLEARING PROCEDURES ARE AT APPENDIX K-4

**PART VI OCCUPATIONAL HEALTH PROGRAM** IAW AR 385-10, Chap 4, a Standard Army Safety and Occupational Health Inspection (SASOHI) will be conducted annually by either the ASG or BSB. A copy of the inspection will be kept on file and a copy forwarded to the higher Headquarters. Listed below are areas that are required.

- **1. VISION PROTECTION PROGRAM** This section establishes 1<sup>st</sup> Armored Divisions' Occupational Vision Protection Program. This document prescribes policy guidance necessary to ensure that the minimal acceptable requirements of the Department of the Army (DA) and the Occupational Safety and Health Administration (OSHA) are being applied.
  - a. Commanders will:
- (1) Establish a vision protection program when eye hazards have been identified during a safety and health inspection.
- (2) Ensure eye hazards and hazardous areas are properly identified with placards or signs.
  - (3) Approve written SOPs governing the preservation of eyesight.
  - (4) Cause regular inspections to determine the continued effectiveness of the program.

- (5) Ensure instruction and training point out the benefits of the program and stimulate cooperation of all concerned.
- (6) Ensure personnel under their command are provided both environmental and personal protective equipment necessary for eye safety.
  - (7) Prevent access to eye hazard areas to anyone not equipped with eye protection.
- (8) Refer personnel to be assigned duties in an eye hazardous area or occupation to the Center for Health Promotion and Preventive Medicine-Europe (CHPPM-E) occupational health nurse located at the ASG for vision screening. Record of referrals for each identified individual shall be maintained separate from medical records for administrative control.
- b. All US military and civilian personnel assigned to work in eye hazardous areas or occupations will:
- (1) Submit to vision screening and examination for evaluating whether the individual meets the visual standards of the work.
  - (2) Keep protective eye wear clean, properly fitted, and in serviceable condition.
  - (3) Adhere to SOPs.
  - (4) Warn others of known hazards or failure to observe safety rules.
  - c. Safety Officers and Safety NCOs are responsible for:
- (1) Coordination with the Industrial Hygienist from the Center for Health Promotion and Preventive Medicine-Europe (CHPPM-E) located in the ASGs for identification of areas, operations, and occupations where eye protection is required.
- (2) Coordination with the Industrial Hygienist from CHPPM-E located in the ASGs for assistance and advice in the selection of proper eye protection devices to protect employee vision.
- (3) Coordination with unit commanders to ensure a vision protection program is in conformance with applicable regulations and directives.
- (4) Conducting random inspections and surveys to determine the continued effectiveness of the vision protection program. The vision protection provided shall be a point of interest in the unit's Annual Comprehensive Safety Survey/Command Inspection (CI).
- d. Any material that could cause damage upon entering the eyes should be considered when surveying for the vision protection program. Some processes are automatically included such as:
  - (1) Laser devices, i.e. night vision devices, range finders.
  - (2) Chemical substance handling.
  - (3) Sandblasting, grinding, power mowers, weed eaters.
  - (4) Indoor racket sports.
  - (5) Banding operations, brake repair/installation.
  - (6) Arc welding.

- (7) Striking with a hammer.
- **2. HEARING CONSERVATION PROGRAM** This section establishes 1<sup>st</sup> Armored Divisions' Hearing Conservation Program. DA Pam 40-501, dtd. 10-12-98, and this Annex prescribe policy guidance necessary to ensure that the minimal acceptable requirements of DA and OSHA are being applied.
  - a. Commanders will:
- (1) Establish a hearing conservation program, if the requirement has been identified during a safety and health inspection.
  - (2) Approve written SOPs governing hearing protection.
  - (3) Cause regular inspections to determine program effectiveness.
- (4) Ensure instruction and training stress the benefits of the program, the hazards and long-term effects of hearing loss, and stimulate the cooperation of all concerned.
- (5) Ensure personnel under their command are provided both environmental and personal measures necessary to preclude hearing loss.
- (6) Prevent access to high noise hazard areas to anyone not equipped with the proper level of hearing protection.
- (7) Refer personnel to be assigned duties in a high noise hazard area or occupation to the CHPPM-E occupational health nurse located at the ASGs for audiometric testing. Records of referrals for each identified individual shall be maintained separate from medical records for administrative control.
  - b. Unit Safety Officers and Safety NCOs will:
- (1) Identify high noise hazard areas and post them in accordance with DA Pam 40-501, Hearing Conservation.
  - (2) Identify individuals assigned to work in those areas.
- (3) Identify individuals by Military Occupational Specialty (MOS) for inclusion in the unit audiometric monitoring plan.
- (4) Examine individual records for a reference audiogram, DD Form 2215. If none is available, immediately refer the person to the Occupational Health Nurse from the CHPPM-E located in the ASG for a baseline survey.
- (5) Establish administrative controls to ensure periodic audiometric tests (as required) are administered to persons identified above.
  - (6) Ensure retest occurs as follows:
- (a) If hearing threshold shifts are detected, individuals will be re-tested after a period of 24 hours of no exposure, in accordance with DA Pam 40-501.
- (b) If hearing threshold shifts are not detected, the individual will be re-tested 1 year later.

- (7) Ensure the unit training program includes health education material and annual briefings on the consequences of exposure to high noise levels.
- (8) Ensure supervisors strictly enforce the use of hearing protection devices by all personnel working in high noise hazard areas. Supervisors must provide official visitors with hearing protection devices prior to authorizing entry to noise hazard areas.
- (9) Set the example by wearing appropriate protective devices when visiting or working in high noise hazard areas.
  - c. Military and civilian personnel will:
- (1) Submit to baseline audiometric screening and examination to determine whether they meet the standards to perform work in noise hazardous areas.
  - (2) Maintain personal protective hearing devices in a clean, serviceable condition.
  - (3) Adhere to SOPs.
  - (4) Warn others of known hazards or failure to observe safety rules.
  - d. Safety Officers and Safety NCOs will:
- (1) Coordinate with unit commanders to ensure a hearing conservation program is established within applicable regulatory provisions.
- (2) Assist their units in coordination with the industrial hygienist from CHPPM-E for identification and evaluation of areas of operations and occupations where hearing protection is or may be required, and selection of proper hearing protection devices to protect employees.
- (3) Conduct regular inspections and surveys to determine the effectiveness of the hearing conservation program. This program shall be a point of interest during the Annual Comprehensive Safety Survey or command inspection.
- e. The essential provisions of an effective hearing conservation program consist of hazard identification; protection through engineering controls or use of protective devices; health education, supervision, and enforcement of established rules; and monitoring both the workplace and personnel.
- f. All identified areas will be posted and the wearing of ear protection will be mandatory where the hazard cannot be reduced through engineering controls. Once identified, a safety and occupational health specialist and manager make a decision whether to declare the entire building, a section of the building, or areas around individual items of equipment as being hazardous, i.e., 35 feet (11 meters) around an operating generator, then dedicated enforcement becomes essential.
- g. Conspicuously post color coded signs and decals to identify noise hazard areas and equipment. These signs and decals alert the worker and visitor that a noise hazard exists and that proper precautions must be taken. Caution signs must be positioned at entrances to, or on the periphery of, noise hazardous areas where they are visible to personnel entering or working.
- **3. RESPIRATORY PROTECTION PROGRAM** This section establishes the 1<sup>st</sup> Armored Divisions' Respiratory Protection Program. TB MED 502 and USAREUR Reg 385-7, dtd 29 Feb 2000 and this document prescribe policy guidance necessary to ensure that the minimal acceptable requirements of DA and OSHA are being applied.

### a. Commanders will:

- (1) Establish a respiratory protection program when the requirement has been identified during a Health Hazard Survey conducted by an Industrial Hygienist and Division Safety.
- (2) Appoint, on orders, a Respiratory Protection Officer/NCO to perform program duties. Ensure that the appointed individual receives the appropriate training through the Division Safety Office.
  - (3) Approve written SOPs governing selection and use of respirators.
  - (4) Conduct regular inspections to determine the continued effectiveness of the program.
- (5) Institute instruction and training for users in the proper use and limitations of respirators.
  - (6) Ensure personnel under their command are provided with approved respirators.
- (7) Prevent access to hazardous areas to anyone not equipped with respiratory protection and who has not been trained in its use.
- (8) Establish procedures for inspection, maintenance, repair, cleaning/disinfecting, storage, issue, fitting, and testing of respirators.
- (9) Refer personnel that are assigned duties in a hazardous material storage/work area, or occupation that subjects soldiers/workers to respiratory hazards, to the Occupational Health Nurse from CHPPM-E located in the ASG for baseline and follow-up physical examinations. Records of annual referrals for each identified individual shall be maintained separate from medical records for administrative control.
  - b. Military and civilian personnel are responsible for:
- (1) Care and use of personal protective clothing and equipment (PPC&E) in accordance with instructions and training received.
- (2) Promptly notifying their immediate supervisor of damage to or difficulties arising from the use of respiratory protection equipment.
  - (3) Strict adherence to SOPs.
  - (4) Warning others of known hazards or failure to observe safety rules.
- (5) Submitting to medical evaluations which the medical examiner considers necessary in evaluating the initial and continuing ability of the individual to use respirators.
  - (6) Complete training.
  - c. Safety Officers and Safety NCOs are responsible for:
- (1) Coordination with Industrial Hygienist from CHPPM-E located in the ASG for assistance and advice in proper care to prevent injury and the selection of proper PPC&E to protect employees from respiratory hazards.
- (2) Coordination with unit commanders to ensure a respiratory protection program conforms with applicable regulations and directives.

- (3) Conducting regular inspections and surveys to determine the continued effectiveness of the respiratory protection program.
- d. The minimum acceptable respiratory protection program requires close liaison among work-ers, supervisors, and safety and medical personnel to protect life and health through proper selection and use of respirators. NOTE: Military protective field masks designed and issued for protection against field concentration of NBC warfare agents will not be used in industrial applications.
- e. Written SOPs shall be prepared covering the use of respirators in dangerous atmospheres that might be encountered in normal operations or emergency conditions. These SOPs will be reviewed by the Division safety and health personnel and approved by the unit commander.
- f. Ongoing training and instruction shall be provided by competent and knowledgeable persons. Minimum training shall include:
- (1) The nature of the hazard and a frank appraisal of consequences resulting from improper respirator use.
  - (2) The respirator's capabilities/limitations.
- (3) Actual use of the respirator, i.e., storage, handling, inspecting, proper fitting, test of face piece to face seal, wearing for familiarity, and finally wearing in a test atmosphere.
  - (4) Coping with emergencies.
  - (5) Cleaning and maintenance of the respirator.
- g. Respiratory protection is no better than the respirator in use, even when used conscientiously. Trained individuals will only accomplish fit testing. Frequent, random assistance by qualified individuals is required to ensure respirators are properly used, cleaned, maintained, and serviceable.
  - h. A written record of assistance visits and findings shall be retained for 2 years.
- i. Prior to an assignment requiring the use of a respirator, personnel shall be screened by competent medical authority.
  - j. The medical status of the respirator user should be reviewed annually.

### 4. CHEMICAL AGENT RESISTANT COATING (CARC) PAINTING

- a. Repainting of equipment is only authorized at USAREUR approved facilities, and only when the present paint is unserviceable or the equipment is not painted proper colors for contingency missions. Repainting only to achieve uniformity or for cosmetic purposes is not allowed. This includes repainting of equipment for the sole purpose of replacing alkyd paints with CARC.
- b. Painting at the unit level using a brush or roller will be limited to spot painting. Spot painting is defined as an area not to exceed two square feet.
- c. Prior to any CARC painting operations, the designated area will be surveyed by an Industrial Hygienist (IH) from the supporting ASG. These areas can be indoors or outdoors. Portions of vehicles can be spot painted with brushes or rollers only by personnel wearing respirators approved by the Industrial Hygienist from the supporting ASG. Responsible supervisors prior to a painting operation will perform a risk assessment.

- d. Well ventilated areas must be approved by the ASG Industrial Hygienist (IH) before spot painting equipment.
- e. Personnel whose duties require exposure to CARC must be made aware of medical screening requirements.
- f. Units must establish an internal system to identify each individual exposed to CARC. NOTE: Any one exposure in a day shall be considered as a full day for recording purposes.
  - g. Limit individual CARC exposure to less than 30 working days per calendar year.
- h. Personnel must be entered into the required medical screening program before exceeding the 30 working day exposure limit. Personnel must be sent to the CHPPM-E occupational health nurse located at the ASGs.
  - i. Respirators available through the supply system are listed in TB MED 502.

#### PART VII RADIATION SAFETY PROGRAM

**1. RADIATION SAFETY** Procedures outlined herein apply to all ionizing and nonionizing radiation sources used by Army personnel or on Army installations.

### 2. RESPONSIBILITIES

- a. 1 AD Safety Office will:
- (1) Conduct a safety evaluation annually at all Brigade and separate brigades/battalion. The radiation safety program will be inspected during the normally scheduled annual Staff Assistance Visit (SAV). The checklist for this SAV is located at annex G.
- (2) Approve the use of the Telephonic Notification Report for Ground Accidents forms to be used by all 1 AD units to report emergencies involving radioactive material. A copy of this report is at annex C.
- (3) Provide a Radiation Safety Officer and Alternate Radiation Safety Officer to serve in this capacity for the 1<sup>st</sup> Armored Division.
  - b. Unit Commanders will:
    - (1) Appoint a Local Radiation Safety Officer (LRSO) and alternate LRSO on orders.
- (2) Ensure LRSOs are properly trained by completing the 16 hour LRSO course for normal commodities or the 40 hour course for units using x-ray, soil density meters or individually controlled radioactive items (ICRI).
  - (3) Ensure LRSOs are given ample time to conduct their duties.
- (4) Ensure that the unit LRSO conducts an annual radiation survey of all areas where radioactive materials are used, stored or maintained.
- (5) Ensure that copies of annual surveys, the unit radiation SOPs, LRSO orders are forwarded to their respective MSC.

- (6) Use the 1 AD standardized emergency form for reporting any radiation incident/accident.
- (7) Ensure formalized radiation protection programs are established for units possessing ICRI.
  - (8) Ensure that radioactive waste is disposed of IAW UR 385-12.
- (9) Ensure that all ionizing and non-ionizing radioactive commodities listed in AR 710-3 are wipe tested at a minimum of 12 month intervals and that the Radiation Asset Tracking and Testing System (RATTS) is implemented within the unit IAW NRC License agreements.
  - c. Brigade and Separate Brigades/Battalions LRSOs will:
    - (1) Conduct an annual radiation survey of all subordinate units.
- (2) Maintain records, i.e. SAV reports, inspection results, surveys, inventories, LRSO orders, training documentation, that demonstrate compliance with the requirements of this SOP.
- (3) Maintain copies of SAVs IAW AR 40-250-1 and a copy of their unit's radiation SOP at the 1 AD safety office.
- (4) Forward copies of 1 AD Major Subordinate Command LRSO orders and ionizing/ non-ionizing inventories to 1 AD Safety annually.
- (5) Use the 1 AD standardized emergency form at annex D for reporting any radiation incident/accident.
  - d. Local Radiation Safety Officer will:
- (1) Conduct annual surveys, certify, properly post, and maintain radiation areas IAW guidelines.
- (2) Conduct annual inventories of all ionizing and non-ionizing radioactive commodities. A copy of the annual inventory will be kept on file for a period of five years.
- (3) Report all incidents up through the chain of command to the 1 AD RSO. During duty hours report telephonically to the 1 AD Safety Office at DSN 337-4833. Reports made after duty hours or on weekends must be made to the 1 AD Emergency Action Center at DSN 337-4042 or CIV 0611-705-4042. Follow up reports can be sent to HQ, 1 AD, ATTN: AETV-S, Unit 24309, APO AE 09252. Telephone is DSN 337-4831.

### 3. RADIOLOGICAL SAFETY PROGRAM

- a. Each unit having radioactive commodities will have an active radiological safety program in effect. This program will include as a minimum:
- (1) Appointment of a qualified LRSO IAW UR 385-12. This individual must be appointed by the commander in writing. For 1 AD Subordinate Commands and separate brigade headquarters, a copy of LRSO orders will be forwarded to HQ, 1 AD, ATTN: AETV-S, Unit 24309, APO AE 09252.
- (2) The LRSO must periodically provide instruction to operating personnel concerningsafeworkingpractices, emergency procedures, correct handling/transportation/disposal procedures, etc. This training must be given to all new personnel prior to their working with

radioactive materials. Refresher training must be accomplished at intervals not to exceed 12 months.

- (3) Radiation control areas must be established for use and storage of radioactive materials in accordance with USAREUR Reg 385-12. Additionally, such areas must be marked as specified. Description/markings will be in both English and the Host Nation language.
- (4) The LRSO must take active measures to ensure adequate control and safeguards are used when handling radioactive materials.
- (5) The LRSO must advise the unit commander in writing of any unsafe practices, defects, or noncompliance. This report should indicate corrective actions taken and/or recommendations to preclude recurrence.
- b. A current unit level Radiation Safety SOP must be available to unit operating personnel and supported units. Generic SOPs are available through the 1 AD Safety RSO at HQ, 1 AD, ATTN: AETV-S, Unit 24309, APO AE 09252 or DSN 337-4833, CIV 0611-705-4833.
- c. The LRSO must advise and provide training to supported units involved in operations with radioactive materials.
- d. All units possessing radioactive material will forward a complete copy of their inventory on an annual basis to their higher headquarters and the local Base Support Battalion Safety Office. 1 AD Major Subordinate Commands will forward a copy of the inventory to HQ, 1 AD, ATTN: AETV-S, Unit 24309, APO AE 09252. The unit will also notify the Fire Department of all locations where radioactive sources are stored so the fire department can be prepared for possible radioactive contamination during firefighting.
- e. Areas where radioactive materials are used and/or stored must be periodically surveyed with the appropriate RADIAC, calibrated for "active health and safety" purposes. A copy of survey results will be forwarded to the unit's higher headquarters on an annual basis or when new items are added to the unit inventory.
- f. Commanders are responsible for establishing procedures to ensure all areas in which radioactive materials and equipment are handled receive this periodic survey.
- g. All radiation workers handling radioactive materials will monitor themselves with the appropriate RADIAC instrument and wash their hands immediately after completion of operations. Protective clothing will be worn when handling open radioactive sources or materials possibly contaminated by radiation.
- h. Commanders of supported units will submit requests for radiological surveys to their higher headquarters Local Radiation Safety Officer (LRSO) if the survey cannot be accomplished by the unit LRSO.
- i. A memorandum for record will be prepared upon completion of the survey. Include date, type of meter, serial number, calibration date, a brief description of the areas and material monitored, a brief description of the results of the survey, and any decontamination/remedial actions, if required. Maintain this written documentation in accordance with AR 25-400-2.

# 4. RADIOLOGICAL MATERIAL AND HAZARDOUS WASTE TRANSPORTATION AND TURN-IN

a. Radioactive materials that are excess or unserviceable will be reported, through command channels, to the National Inventory Control Point (NICP) for disposal instructions unless the technical literature applicable to the item instructs otherwise. Contact the USAREUR Radiation

Control Officer, 200th MMC-TSD, AERLA-MMC-MACCD, Unit 23203, APO AE 09263, Tel DSN 484-7334 or CIV 06494-13-7334 for instructions.

- b. Radioactive waste is any item or material which is itself radioactive, contaminated, or suspected to be contaminated with radioactive material, as determined by the LRSO.
- c. Refer to USAREUR Reg 385-12 for disposal of unwanted radioactive material/radioactive waste or contact the 1 AD RSO, Tel DSN 377-4833.
- d. Prior to shipment of radioactive material for disposal, contact CDR, 524th Maintenance Company, by phone DSN 495-6486, or MPS to CDR, 524th Maintenance Company, ATTN: Radioactive Waste processing Facility, TMDE SUPPORT REGION, EUROPE (PROV), ATTN; AMXTM-GP-EN, APO AE 09138-4628.
- e. Transportation of radioactive material will be accordance with USAREUR Reg 385-12, USAREUR Reg 55-4 (Draft), DOT standards, and Host Nation Regulations.
- f. Units will contact their local transportation office for guidance on packaging of radioactive waste.
- g. Drivers of vehicles carrying radioactive material will adhere to the procedures outlined in USAREUR Reg 55-4 (Draft).
- h. Turn in of radioactive material will be accomplished using a DD Form 1348-1 DOD, Single Line Item Release/Receipt Document. The unit LRSO will certify shipment of any radioactive source.
- i. For turn in of radioactive waste only, address the DD Form 1348-1 to CDR 524th Maintenance Company, ATTN: Radioactive Waste processing Facility, TMDE SUPPORT REGION, EUROPE (PROV), ATTN; AMXTM-GP-EN, APO AE 09138-4628.

### 5. RADIOACTIVE INCIDENT RESPONSE

- a. In the event that a radioactive source is damaged or suspected of leaking, the device will be isolated. The unit LRSO will be notified who in turn will notify higher headquarters LRSO. Each LRSO will notify his/her higher headquarters RSO up to and including the V Corps RSO and V Corps Chemical. During duty hours reports to 1 AD RSO should be made to DSN 337-4833. During non-duty hours or on weekends report incidents to the 1 AD Emergency Action Center at DSN 337-4042 or CIV 0611-705-4042.
- (1) Personnel not directly involved in contamination containment and cleanup will vacate the affected area to prevent unnecessary personnel contamination.
- (2) Personnel who may have become contaminated will be segregated and will not leave the area until monitored for contamination of skin and clothing. If suspected contamination is as a result of a Tritium operation, the procedures in the unit SOP will apply.
- (3) The contaminated area will be secured to prevent unauthorized entry. Closing of doors to the room will normally suffice.
- (4) Procedures for containment and decontamination of radioactive material that are contained in UR 385-12 will be followed.
- (5) If personnel are injured during any radiation incident/accident, the local US medical facility will be notified as soon as possible by the fastest means possible. If the number is busy, a runner should be sent.

- (6) Personnel with minor wounds will be decontaminated prior to leaving a restricted/controlled area. In the event an individual must be transported immediately for medical treatment, precautions will be taken to prevent the spread of contamination by that person. The LRSO or alternate will accompany the injured person to the medical center. Safety procedures for monitoring the level of contamination will be conducted in accordance with TM 3-261.
- (7) Do not allow personnel incurring radiation injury to return to duty until approval for their return is obtained from the attending physician and unit LRSO.
- (8) Survey and approve decontaminated areas for re-entry by the LRSO before reoccupying the area.
- (9) In the event of a fire, immediately notify the local fire department. If possible, radio-active devices should be removed to a safe area.
  - (10) Should a radioactive source be involved in a fire, personnel shall:
    - (a) Remain upwind.
    - (b) Close all windows and doors to the immediate area.
    - (c) Turn off ventilation and air systems.
- b. A determination of the cause of any radiation accident/incident will be made by the unit LRSO, confirmed by the Division or Separate, Brigade/Battalion LRSO, and a full report filed through the 1 AD RSO within 7 duty days following the event. 1 AD RSO will file one copy of the report with the V Corps RSO within 10 duty days. Reports will contain the following essential elements of information (EEI):
  - (1) Name of reporting organization.
- (2) Location, time, date of the incident . Whenever possible photos will be taken and provided.
  - (3) Source of ionizing radiation (radioisotope, quantity, etc.).
  - (4) Name and SSAN of the injured, contaminated, or overexposed personnel.
  - (5) Chronological description of the incident from occurrence until it was resolved.
  - (6) Individual account of the incident as it relates to each person indicated above.
  - (7) Steps taken to prevent recurrence.
- (8) Name, rank, phone number, and full mailing address of the individual(s) investigating the accident/incident as well as the person preparing the report.
- (9) Emergency Telephone numbers. Obtain the numbers applicable to your area of operation for and write them in here for future reference:
  - (a) Medical Assistance:
  - (b) Military Police:
  - (c) Fire Department:

- (d) Installation RSO/Safety Officer:
- (e) Company/Unit LRSO:
- (f) Brigade/Battalion LRSO:
- (g) Division/COSCOM RPO/CC:
- (h) 1 AD Safety (RPO): DSN 337-4833 CIV 0611-705-4833
- (i) 1 AD DOC: DSN:337-4042 CIV 0611-705-4042
- (j) V Corps CC: DSN 370-5335/5336 CIV 06221-575335.
- (k) V Corps Safety (RPO): DSN 370-5661 CIV 06221-575661.

### PART VIII ACCIDENT REPORTING AND INVESTIGATION PROGRAM

### 1. GROUND ACCIDENT NOTIFICATION AND REPORTING

- a. The commander who first becomes aware of any Class A or B, on or off duty accident, will immediately notify the 1 AD Command Center (CC) through their chain of command at DSN 337-4595 or CIV 0611-705-4595. Telephonic notification will utilize the DA Form 7306-R at Annex C. This notification does not negate the requirements for SIR or OPREP reporting and should be done NLT four hours of the occurrence. The 1 AD Command Center will notify1 AD Safety, DSN 337-4833.
- b. V Corp Safety will complete all telephonic notification of accidents to the United State Army Safety Center (USASC) upon the request of 1 AD Safety. Individual units will not directly notify the USASC or the USAREUR Safety Office. If the Safety Center elects not to investigate all Class A and B on duty ground accidents will be investigated by a Centralized Accident Investigation Board. See Part VIII paragraph 2 for more information.
- c. DA Form 285 is completed only for Class A or B on duty accidents for inclusion in Centralized Accident Investigation Ground (CAIG) reports. See CAIG procedures at paragraph 2 for processing of Class A or B on duty accident reports and the accompanying DA Form 285, Army Accident Report. The DA Form 285 is also used to report selected vehicle, equipment, and structural fires in accordance with AR 385-40. Completed reports will be forwarded within 30 days to HQ, 1 AD, ATTN: AETV-S, Unit 24309, APO AE 09252. 1 AD Safety will submit all reports, through channels, to the United States Army Safety Center.
  - d. Off duty soldier fatalities (Class A off duty accident).
    - (1) Off duty soldier fatalities do not require a CAIG board to be appointed.
- (2) The first general officer in the soldier's chain of command will be briefed on all on-duty fatal accidents.
- (3) The commander of the accident victim's unit will appoint an investigating officer and will conduct an investigation utilizing the DA Form 285-AB-R, in accordance with AR 385-40 and DA Pam 385-40.
- (4) Following every POV accident that results in a fatality or serious injury, the battalion commander will conduct an accident assessment.

- (a) This assessment will meet within six hours of the accident notification.
- (b) Commanders should include the unit safety officer and NCOs, local medical personnel, military police and chaplains to assist the assessment team.
- (c) The goal of the assessment is to determine what happened, why it happened and how it could have been prevented.
- (d) The assessment will involve the implementation of corrective and preventive measures.
- (e) The assessment results will be briefed to the brigade commander of the unit experiencing the accident, and provided to the 1 AD Safety Office within three working days of the convening of the Accident Assessment Team. The format is an Army Ground Accident Report to include three additional paragraphs; pre-accident phase, accident phase, and post accident phase. Each paragraph will describe in detail the circumstances that were involved in each phase.
- (f) 1 AD Safety will forward this information to the command group, publish the circumstances surrounding the accident for safety awareness, and determine what actions can be implemented at the Division level.
- (5) 1 AD Safety will submit the original and two copies of fatal Class A accident reports to the V Corps Safety Office within 25 days of the accident occurrence.
- (6) Commanders of 1 AD brigades, separate brigades and battalions will submit the original and two copies of the fatal off-duty Class A accident reports to the 1 AD Safety office within 20 days of the accident occurrence for distribution.
- (7) The Chief of Staff, 1 AD is the reviewing authority for all fatal Class A off duty accident reports for 1 AD Separate Brigades. Upon approval, 1 AD Safety will forward the original report and one copy to V Corps Safety.
- e. Commanders of divisional units will submit the original report and two copies of non fatal Class A or B off duty accident reports (DA Form 285-AB-R) to the to the 1 AD Safety Office within 20 days of accident occurrence. Safety Manager, 1 AD will approve the report and forward the original report to the V Corps Safety. V Corps Safety will retain a copy, and provide one additional copy to USAREUR Safety.
- f. Commanders of 1 AD separate brigades and battalion will submit the original report of all non fatal Class A or B off duty accident reports (DA Form 285-AB-R) through command channels to the 1 AD Safety Office no later than 20 days after the accident occurrence for distribution. Safety Manager, 1 AD will approve and forward the report to V Corps Safety. V Corps Safety will retain a copy and provide an information copy to USAREUR Safety.
- g. All Class C and D on and off duty accidents are reported on the DA Form 285-AB-R, Abbreviated Ground Accident Report (AGAR), as directed by AR 385-40 and DA Pam 385-40. The first line supervisor or unit safety representative of the individual involved in an accident must immediately investigate the facts and circumstances of each accident, and is responsible for preparation and timely submission of accident reports. Full time and additional duty safety personnel will provide assistance, and review completed reports prior to submission. Whenever a DA Form 285 or DA Form 285-AB-R is prepared, full completion of the form is required.
- h. All commanders will furnish through, the chain of command, the original and two copies of the report for all C and D on or off duty accidents to the 1 AD Safety office within 25 days of

accident occurrence. 1 AD Safety will forward the original report to V Corps Safety. V Corps Safety will forward the original report to the USASC, retain a copy, and provide one additional copy to USAREUR Safety.

- i. All on-the-job Local National employee accidents will be reported through the BSB Safety Office who services the injured employee. A copy will be forwarded to the 1 AD Safety office.
- j. On duty injuries or occupational illnesses to Army civilian personnel will be reported in accordance with the provisions of AR 385-40 and host nation procedures. Forward a copy of compensation claims the 1 AD Safety office as prepared.

### 2. CENTRALIZED ACCIDENT INVESTIGATION GROUND (CAIG)

- a. The Centralized Accident Investigation Ground (CAIG) Program in 1 AD is designed to provide accurate and complete documentation of accident events, determine causal factors, and recommend corrective actions.
- b. On duty Class A and B ground accidents will be investigated using the procedures outlined in AR 385-40, DA Pam 385-40, and this section. Other classes of accidents may be investigated utilizing CAIG board procedures as directed by the CG USAREUR, Commander, 1 AD. Board members will not be members of the same battalion experiencing the accident.
- c. Appointment to a CAIG board constitutes a full time duty assignment until the completed report has been reviewed, approved, and out-briefed to the Commander, 1 AD, or a designated general officer.
  - d. The appointing authorities for all 1 AD CAIGs are as follows:
- (1) Accidents within 1st Armored Division (1AD) will be the Commanding General, 1AD or his designated representative. 1AD will complete appointment orders and provide a copy to the V Corps Safety Office.
- (2) Accidents within all separate brigades and separate units, the brigade commander will appoint board and forward names to the 1 AD Safety office. The 1 AD Safety office will draft appointment orders for the board. The Assistant Chief of Staff (ACofS) G1 will approve board orders. If the G-1 is not available the Deputy G-1 or Safety Manager will approve board orders.
  - e. The 1 AD Safety Office will:
    - (1) Brief the board president on his duties and responsibilities if requested.
- (2) Monitor the safety investigation and ensure final report complies with regulatory require- ments.
  - (3) Provide technical advice during all phases of the investigation as requested.
- (4) Coordinate out-briefs at Division level and above and ensure proper distribution of completed reports.
- (5) Publish lessons learned and/or develop articles for inclusion in "Countermeasures" or other safety related publications as needed.
  - (6) Staff the CAIG report for approval.
  - f. Involved Unit Commander will:

- (1) Secure the accident site until arrival of the CAIG board.
- (2) Collect and assemble the items listed in Appendix G of DA Pam 385-40 and Chapter 4 of AR 385-40, securing all information until arrival of the CAIG board president.
- (3) Attempt to segregate personnel involved in the accident from all other personnel and each other. Obtain written statements from involved personnel as soon as possible after the accident and hold for the CAIG board president. Statements do not have to be sworn statements and as such they cannot be released to any other investigators without prior approval of the person who wrote the statement. Under no circumstances will these statements be given to MP, CID, line of duty, or collateral (AR 15-6) investigators.
- (4) Appoint a POC to act as a liaison between the CAIG board and the unit involved in the accident until completion of the investigation.
- (5) Coordinate for administrative support to the CAIG board to include transcription, typing, office space, class A telephone access, copier support, and transportation support as needed from the work area to the accident site.
- (6) Ensure that a safety professional is appointed as a safety advisor to the board as necessary.
  - g. CAIG board president will:
    - (1) Perform all duties as described in Chapter 2, DA Pam 385-40.
- (2) Assemble and brief the accident board, and commence the investigation within 24 hours of notification.
- (3) Provide initial and weekly updates to 1 AD Safety regarding the progress of the investigation for input to 1 AD command group.
- (4) Submit the completed report to the 1 AD Safety Office for review prior to submission for the chain of command review comments.
- (5) Ensure all report suspenses are met as stated in the CAIG board appointing order special instructions.
- (6) Prepare and deliver the accident investigation out-brief to the Commander, 1 AD or his designated representatives to obtain approval of the report. Be prepared to provide out-briefings to higher headquarters as directed by the Commander, 1 AD.
  - h. Accident scene preservation.
- (1) Upon completion of notification procedures outlined in this appendix, the commander who first becomes aware of a Class A or B on duty accident will take steps to ensure the accident scene is preserved in accordance with the procedures in Chapter 2, DA Pam 385-40.
- (2) Accidents that occur on non-U.S. controlled property will require coordination with host nation authorities to attempt to document or preserve the accident site to the extent allowed by the civilian authority. The senior military representative will coordinate with the civilian authorities and obtain the needed information to obtain accident scene data and host nation accident reports prepared by the civil authorities. Military police liaison personnel are available in most areas to assist in this effort.

- (3) Rescue and recovery of accident victims will take precedence over accident scene preservation. Investigation actions will not interfere with rescue and recovery operations. Recovery and photographing of victims obviously deceased will be IAW DA Pam 385-40, para 2-2 b(1).
- (4) Minimization of environmental damage, to include cleanup of oil, fuel and other hazardous material spills will take precedence over accident scene preservation. Every effort will be made to photograph the accident scene prior to and during the cleanup effort. Take note of any additional damage to equipment involved in the accident, or property damage at the accident site, resulting from the cleanup operations. This damage will be included in determination of the total accident cost.
- (5) When the situation does not permit preservation of the accident scene, MP or CID personnel may remove all items of evidence needed for their investigation. If wreckage must be moved, photos will be taken or a sketch of the scene made with sufficient detail and measurements to accurately identify the original position of all components, wreckage, and debris, which was disturbed or removed. Evidence will be stored in a secure area and guarded until released by the board president. Personnel knowledgeable of the cleanup effort and the recovery operation will be made available to accompany CAIG board members during the preliminary inspection of the accident site.
- (6) Accident scene is restricted to personnel directly involved in investigating the accident. A crash pass system is recommended to control entry into the accident site.

#### i. CAIG procedures.

- (1) All 1 AD CAIG boards will consist of at least 3 voting members (president, technical member, and recorder) and one non-voting member (Safety Advisor). The board president must be a field grade officer, preferably branch qualified in the area being investigated. The appointing authority will provide local augmentation as requested by the board president. Local augmentees will be appointed as members or advisors. The CAIG board president will, as a minimum, conduct an outbrief to the approving authority for the accident.
- (2) All personnel appointed as members will be voting participants. Therefore, members, including the board president will be from organizations other than the activity incurring the accident, and will be screened to ensure that no member of the board has an interest in the accident that may bias the outcome of the investigation. Local members will normally consist of technical specialists qualified in the maintenance or operation of the equipment involved in the accident and a medical officer as necessary.
- (3) Personnel appointed as advisors are non-voting participants. Local advisors function to enhance and expedite the investigation and reporting of the accident. Local advisors will normally consist of the servicing safety office POC and a POC from the organization incurring the accident. In cases where equipment involved is unique to one organization or activity, technical specialists from organizations other than that incurring the accident may not be available. In that case, 1 AD Safety will contact V Corps Safety for assistance in appointing technical personnel from V Corps based organizations, or for assistance in obtaining technical expertise from outside USAREUR.
- (4) Both members and advisors will be appointed on orders and will comply with the provisions of AR 385-40, DA Pam 385-40, USAREUR Reg. 385-40, and the 1 AD Safety SOP.
- (5) The CAIG board will have access to all evidence, photographs, and witness statements collected by MP or CID personnel. The board president is responsible for ensuring that no member of the board takes any action that would destroy the evidence or would compromise the legal chain of custody of those items.

- (6) The board will have access to all personnel, medical, and financial records of personnel involved in accidents. The accident unit will provide maintenance records for the equipment involved in the accident. If evidence is forwarded to CID laboratories for analysis, the board president will be provided a copy of the laboratory report, and will be advised of test results that are received from the laboratory telephonically. The board president may determine that additional information is necessary for his/her investigation. When this occurs, the board president will request additional analysis by the laboratory. The results of the additional testing are considered common source factual data available for use by all investigators.
- (7) If criminal activity, other than negligence, dereliction of duty, or disobedience of an order is discovered during the investigation by the accident board or MP/CID investigators, the board president will notify 1 AD Safety. 1 AD Safety will coordinate with V Corps Safety for approval to stop or continue the investigation.
- j. Review of CAIG Reports. Process CAIG reports promptly through each reviewing agency. CAIG board president and 1 AD Safety will monitor the progress of report processing through all phases of review until completion.
- (1) Unit review. Chain of command review will begin with the unit commander, or the supervisor directly responsible for the operation, material, or persons involved in the accident. All members of the chain of command subordinate to the approving authority will:
- (a) Concur or non-concur, in writing, with the findings and recommendations of the CAIG report.
- (b) Note corrective actions taken or proposed and recommendations for additional actions by higher headquarters, or other agencies.
- (c) Expeditiously forward the original and all copies of the report through the chain of command to V Corps Safety.
- (d) Ensure that factual data of the accident are circulated promptly within the unit and that recommendations that can be put into effect immediately at the unit level are implemented.
- (2) Upon completion of the command review, board president will notify 1 AD Safety to arrange for an out-brief with Commander, 1 AD, or his designated representative. Selected accidents may be out-briefed with the CG, V Corps or his staff. Board president will provide the original and two copies of the completed report to 1 AD Safety not later than 2 days prior to the scheduled out-brief. Board president will compile and deliver to 1 AD Safety all notes, data, worksheets, witness tapes and statements, and any other data obtained during the investigation for destruction or to be filed with the 1 AD copy of the completed report.
- (3) The approving authority for all on-duty Class A and B CAIGs from 1AD will be the CG, V Corps. The approving authority, either prior to or following the out-brief will:
- (a) Approve or disapprove the report as written or amended by reviewing officials, and make additional comments as required.
- (b) Make note of actions that can or will be completed by the approving authorities headquarters.
- (c) Make note of actions that are beyond the purview or capability of the approving authority and refer these actions to the appropriate headquarters.
  - (4) If the CG or DCG is unavailable, the CofS will be the approving authority.

- k. Report distribution.1 AD Safety will forward the original and two copies of the completed report to V Corps Safety.
- I. All requests for information related to any report of accident investigation will be processed in accordance with the provisions of Chapter 1, AR 385-40.

# 3. IMMEDIATE ACTIONS AND INITIAL NOTIFICATION PROCEDURES AVIATION CLASS A, B, AND C MISHAPS

- a. The commander who first becomes aware of an aircraft mishap will:
- (1) Take action necessary to save lives and minimize further property damage at the mishap site.
- (2) Place guards at the mishap site to prevent the moving or disturbing of the wreckage until relieved by the owning unit.
- (3) Notify the commander of the unit owning the aircraft. If unit ownership cannot be established or if the owning unit cannot be expeditiously notified, contact the 1 AD Command Center at DSN 337-4595 or COMM 0611-705-4595.
- (4) During normal duty hours, notify 1 AD Safety Office at DSN 337-4831/4835/4832/4833. COMM number is 0611-705-4831/4835/4832/4833.
- (5) 1 AD Safety will notify V Corps Safety, who in turn will notify the U.S. Army Safety Center (USASC).
- (6) The USASC will elect to investigate or not. If not, a local investigation will be conducted, see paragraph 6 this section.
  - b. The owning unit will:
- (1) Immediately notify the 1 AD Command Center (DSN 337-4595 or COMM 0611-705-4595) of preliminary accident data and provide a point of contact and phone number. Use the DA Form 7305-R reporting format at Annex D. Additionally, during duty hours contact the 1 AD Safety Office at DSN 337-4831/4835/4832/4833. COMM number is 0611-705-4831/4835/4832/4833.
- (2) Immediately notify Commander, Army Flight Operations Detachment (AFOD) (HDL MIL 373-6201/6202 or via CIV 06221-176201/6202) of preliminary mishap data. This notification is required for all aircraft mishap classifications from A to C.
- (3) Immediately upon notification of an aircraft mishap, dispatch an aviation Safety officer to the mishap site to determine the extent of the damage and the initial mishap classification.
- (4) Direct the unit aviation safety officer to begin preliminary investigation actions. Review para 4-3, DA Pam 385-40 concerning immediate actions to take. A list of required actions follows:
- (a) Ensure the mishap site is secure. No one may enter the mishap site without proper authorization. Follow procedures outlined in para 4-5, AR 385-40 and para 2-2, DA Pam 385-40.

- (b) Arrange to have photos taken of the mishap site. Thirty-five millimeter color prints are best. Small format prints and Polaroids are generally of little value, but are better than nothing. Timely, good quality photographs preserve evidence that could be lost due to heavy rain, snow, or removal of bodies.
- (c) Coordinate with the flight surgeon for the proper disposition of fatalities. When victims are obviously deceased, the bodies should not be removed before being photographed and examined by the medical officer if he/she is reasonably available (i.e. can be on site within two hours). Fatalities may be removed after photographing and transferred to the morgue; however, care must be taken to disturb the wreckage as little as possible (see para 2-2a(1), DA Pam 385-40). Pathologists from the Armed Forces Institute of Pathology (AFIP), Washington, D C normally perform autopsies. Refer to paragraph 5, this Part, for specific guidance concerning the flight surgeon's responsibilities in conducting the medical aspects of the investigation.
- (d) Locate and identify all witnesses by name, address, and telephone number. Take initial witness statements, preferably on standard or microcassette tape.
- (e) Remind the commander of the requirement for a command directed Fitness for Duty Examination for all nonfatal accident victims. See para 5, this Part.
- (f) Coordinate with maintenance personnel as required for fuel and oil samples from all aircraft sources. Refueling sources should also be sampled if fuel is suspect. These samples will be sent expeditiously to the appropriate laboratory for immediate analysis. No other maintenance inspection will be performed or samples taken without the Accident Investigation Board president's approval.
- (g) Collect and secure all air crewmember aviation life support equipment (ALSE) and have it available for inspection by the accident investigation board.
- (h) Coordinate with the nearest U.S. Air Force Air Weather Service (AWS) facility capable of providing the weather that was present in the vicinity of the mishap site for the period of plus or minus one hour from the time of the mishap. Request a written report of those conditions signed by a forecaster.
- (5) Provide administrative and logistical support for the investigation board. Fund all support costs for board members, other than travel for U.S. Army Safety Center personnel when applicable.
- c. If it is suspected that Air Traffic Control may have been involved in the mishap, coordinate with the appropriate ATC facility to obtain a transcript of any voice recordings pertaining to the mishap.
- d. Appendix G, DA Pam 385-40 list items that will be needed in support of accident investigation board. Collect and secure the following documents:
  - (1) The applicable flight plan for the mishap
- (2) DD Form 365F (Weight and Balance), for the mishap flight and the weight and balance records for the mishap aircraft
  - (3) The Performance Planning Card (PPC) for the mishap flight.
  - (4) The aircraft log book and maintenance historical records.
- (5) Crewmembers' Individual Flight Records Folder (IFRF), closed out, including the time flown on the mishap flight. Ensure the appropriate remarks are made on the DA FORM 759.

- (6) Crewmembers' Individual Aircrew Training Program (ATP) folders.
- (7) Any standard operating procedures (SOPs) applicable to the mission that was being conducted at the time of the mishap.
- (8) In the event of fatalities, implement survival assistance procedures IAW AR 600-10 and unit SOPs or directives.
- (9) Dispatch guards to the mishap site to relieve the guarding unit or military police. The owning unit is responsible for mishap site security until the President of the accident investigation board releases the wreckage for recovery, see section 42,c, (2).

### e. 1 AD Safety Office will:

- (I) Establish immediate communications with V Corps Safety to coordinate accident investigation board support as required.
- (2) Ensure the Command Group has been notified and pass on information as it becomes available.
- (3) Assist with the coordination between civil authorities, German Military, and U S Military as required to conduct and complete the accident investigation.
- (4) Coordinate with subordinate aviation unit commanders for board members, as required.
- (5) Review the completed report prior to submission to the chain of command for reviewing officials comments.
- f. 1 AD Public Affairs Office will screen all public information releases regarding the mishap for accuracy and conformance with regulations.
  - g. 1 AD G3 Aviation Office will provide aviation support as required.
- h. 1 AD Surgeon's Office will ensure a qualified flight surgeon is provided to accomplish the requirements set forth in paragraph 5, this Part.
- **4. PRELIMINARY ACTIONS AND REPORTING PROCEDURES AVIATION CLASS D, E AND FOD MISHAPS** Immediate notification procedures for Class D, E, and FOD aviation mishaps are:
- a. For a Class D to F (Class E and F only when a precautionary landing was performed) mishap notify AFOD immediately, 24 hours a day, 7 days a week. This notification may be forwarded via ATC facilities or directly via the telephone (CIV 06221-17-6201/ 6202 or DSN 373-6201/6202. V Corps Aviation Safety Officer will be notified telephonically of any class D accidents at CIV 06221-57-5661/5664 or DSN 370-5661/5664.
- b. There is no requirement to notify the Command Center or 1 AD Safety for Class E or F mishaps.
- c. Unit commanders should take the preliminary actions they deem necessary and appropriate for the situation. Class D, E, and FOD mishaps will be completed using DA Form 2397-AB-R, Abbreviated Aviation Accident Report (AAAR). The report should be completed and forwarded through Divisional aviation Brigade or separate aviation Brigade IAW applicable Brigade and Division SOP and then direct to the U.S. Army Safety Center to arrive within 10 calendar days IAW AR 385-40. Copies of all Class D, E and FOD will be sent to V Corps

Aviation Safety Officer, USAREUR Safety and other applicable agencies via e-mail, fax, or mail distribution depending on admin capability of the unit. V Corps Safety office fax number is 370-5695 or CIV 06221-57-5695. V Corps Aviation Safety Officer e-mail address is: G1SAFAVNOF@HQ,C5.ARMY.MIL.

#### 5. AVIATION POST ACCIDENT MEDICAL EXAMINATIONS

- a. Aviation pathology is that part of pathology that is employed in the solution of problems associated with aircraft accidents, accident prevention, and research.
  - b. Aircraft mishaps are investigated by medical personnel to:
    - (I) Determine accident cause factors
    - (2) Evaluate aviation life support equipment
    - (3) Evaluate and develop crashworthiness design features in aircraft
    - (4) Develop a data base to be used in accident prevention
    - (5) Develop statistical data to evaluate overall military accident experience

#### c. Procedures

- (1) Nonfatal aircraft mishaps
- (a) IAW AR 40-501, immediately after a Class A, B, or C aviation mishap, all crewmembers on board will report to a flight surgeon for a medical evaluation. Blood and urine analysis are an essential part of the examination procedure. The commander may direct a medical examination for a Class D and E mishap if there is a possibility that medical considerations may have been instrumental in causing or should be investigated as a result of such mishap. All personnel injured as a result of an aircraft mishap will also undergo a Type B medical examination.
- (b) The post accident medical examination must take place at the earliest possible time following the accident. Timeliness is essential to the discovery of hidden injuries or conditions and in preserving evidence of non-prescribed medications, poisons, alcohol and/or illegal substances.
- (c) Proper chain of custody must be maintained on the blood and urine samples until testing is completed.

#### (2) Fatal aircraft mishaps

- (a) Class A aircraft mishaps will be investigated by a Centralized Accident Investigation Board (CAIB) from the U S Army Safety Center. This board will be augmented locally to comply with the requirements of AR 385-40. The appointment orders will be drafted by the 1 AD Safety Office and approved by the Assistant Chief of Staff, G1 or Deputy.
- (b) The Armed Forces Institute of Pathology (AFIP) will be alerted by USASC, for any Class A accident involving a fatality, and will sometimes dispatch an aviation pathologist to participate in the investigation.

#### d. Responsibilities:

(1) 1 AD Safety Manager will:

- (a) Notify the 1 AD Surgeon of the aircraft mishap.
- (b) When necessary, coordinate with V Corps Safety to determine arrival date, location and time of AFIP team members.
- (c) When necessary, coordinate transportation/hotel requirements for AFIP team members as required.
- (2) 1 AD Surgeon will assign a qualified flight surgeon to be a member of the Mishap Investigation Board.
- (3) Flight Surgeon as a member of an accident investigation board will perform duties as outlined in Chapter 2, para 2-1c (4), DA PAM 385-40. Administrative responsibilities are outlined in other sections of DA PAM 385-40. Additionally, immediate actions, once appointed to the board will be:
- (a) Immediately go to the mishap location, as a member of the accident investigation board. Usually board members, when feasible, will go as a team.
  - (b) In case of fatality:
    - 1 Maintain control of the deceased.
- $\underline{2}$  Ensure photographs are taken of the deceased before the bodies are moved. Photographs should include;
  - a Multiple full body views of deceased as found.
  - b Multiple views of deceased showing relationship to aircraft structure.
  - <u>c</u> Detail views showing obvious injuries.
- $\underline{3}$  Transport deceased to nearest U S Army/Air Force medical facility. Plan subsequent transfer of deceased to final location. Utilize government transportation to the maximum extent possible.
- 4 Arrange to have full body x-rays, both clothed and unclothed, taken at either the interim medical facility or at the Landstuhl Regional Medical Center.
  - 5 Participate in the postmortem examination as requested by the AFIP.

# 6. AIRCRAFT MISHAP INVESTIGATION (ADMINISTRATIVE REQUIREMENTS; CLASS A, B, AND C MISHAPS)

- a. If USASC elects not to investigate, a local aircraft mishap investigation will be conducted. A three-member board will be appointed from personnel outside the battalion experiencing the accident. The board president must be an aviator at a higher rank than the accident aircraft. The appointing authorities for all 1 AD aviation accident investigation boards are as follows:
- (1) Accidents within 1st Armored Division (1AD) will be the Commanding General, 1AD or his designated representative. A copy of the appointment orders will be provided to the V Corps Safety Office.

- (2) Accidents within all brigades and separate units, the unit will provide names to 1 AD Safety who will draft orders. The Assistant Chief of Staff (ACofS) G1 will sign the orders. If the G-1 is not available the Deputy G-1 or Safety Director will sign board orders.
- b. The CG, 1 AD is the approving authority for Class A or B aircraft accident investigations involving 1AD, 1ID, and 3CC aircraft. The DCG, 1 AD is the approving authority for Class A or B aircraft accident investigations involving all non-divisional and separate units aircraft. The 1 AD Safety Manager is the approving authority for Class C investigations. All inquiries concerning aircraft mishap investigations should be directed to Commander 1 AD, ATTN: AETV-S, Unit 24309, APO AE 09252.
- (1) Class A ,Class B and Class C completed reports will be forwarded within 30 days to HQ, 1 AD, ATTN: AETV-S, Unit 24309, APO AE 09252. 1 AD Safety will submit the original and two copies of the report to V Corps Safety.
- d. PROCEDURES. Aircraft accident investigations will be conducted IAW AR 385-40, DA Pam 385-40, and paragraph 6a above. During aircraft mishap investigations all board members work for the appointing authority. The president of the accident investigation board is authorized and encouraged to contact the 1 AD Safety Office for assistance in conducting the investigation. The board president of the locally appointed accident investigation board will submit the completed Class A, B, or C accident investigation to the 1 AD Safety Office for review prior to submission to the chain of command for review.
  - e. The commander experiencing the mishap will:
- (1) Furnish necessary administrative support to the accident investigation board. Normally, this includes office space (with the capability of conducting private interviews), Class A telephone access, transportation, clerical support, records and personnel access, and the capability for forms reproduction.
- (2) Once the CAIB President has released the wreckage, coordinate with the appropriate maintenance facility to recover the wreckage and perform an estimated cost of damage (ECOD). Completion of ECOD for accidents will be IAW para 2-11, AR 385-40.
- (3) Excuse all unit members detailed to assist the board from normal duties until the investigation is completed.
- (4) Provide an ASO to be an advisor to the mishap investigation board to provide continuity and liaison between the board and the chain of command.

#### f. 1 AD Safety Office will:

- (I) Coordinate with subordinate aviation commanders for board members, as required.
- (2) Coordinate all support requirements external to 1 AD.
- (3) Coordinate with 1 AD G3 to task for board members from outside 1 AD MSC units.

#### 7. COLLATERAL INVESTIGATIONS

- a. A collateral investigation is required for all Class A accidents. Other accidents that may require a collateral investigation are outlined in AR 385-40, para 1-8 c (2)-(4).
- b. Collateral investigations are conducted to obtain evidence that may be used in litigation, claims, disciplinary actions or adverse administrative actions. Collateral investigations are conducted independently from other investigations and may use only physical evidence from

these investigations. Collateral investigations are releasable under the Freedom of Information Act subject to the application of the Privacy Act.

- c. The commander whose personnel, equipment, or operations are involved in the aircraft accident is responsible for initiating a collateral investigation IAW AR 15-6 and AR 385-40. If a commander is unable to conduct an adequate investigation (i.e., for reasons of remoteness or lack of qualified personnel), he/she must request assistance from the next higher headquarters.
- d. Collateral investigations for Class A aircraft accidents will be appointed by the GCMCA. The SPCMA is empowered to convene a collateral investigation for all but Class A aircraft accidents.
- e. The local servicing judge advocate office should review all collateral investigation reports. All collateral investigations pertaining to Class A accidents must be forwarded to Commander, V Corps, ATTN: Administrative Law Division, Unit 29355, APO AE 09014, for legal review and retention of the report. V Corps, Administrative Law Division, phone number is 370-5854 or CIV: 06221-57-5854.
- f. Commanders will ensure that Collateral Investigation Officer receives a briefing by the Office of the Staff Judge Advocate, IAW AR 15-6 on policy and procedures governing relationship and restrictions between safety accident investigation and collateral investigation. The Briefer will ensure Collateral Officer and Accident Board President for the safety board are familiar with provisions of AR 385-40 and this SOP on sharing of information and restrictions between these separate investigations.
- **8. THE SUMMARY OF RECORDABLE ACCIDENTS** The summary of recordable accidents will be completed by each major subordinate command for submission to the 1 AD Safety Office not later than 15 calendar days following the last day of the reporting quarter, (e.g. 1st quarter report will be due on 10 January).
- a. Submit completed report to HQ, 1 AD, ATTN: AETV-S, Unit 24309, APO AE 09252.. Report may be submitted in written format or by electronic message or email.
- b. This report will include an analysis of all Class A thru D accidents. As a minimum the following information should be included in the report:
  - (1) Number and type of each accident.
  - (2) Trends and analysis of all accidents.
  - (3) Whether seat belts were worn as appropriate and if alcohol was involvement.
  - (4) Whether on duty or off duty.
- c. Questions regarding report completion or submission should be directed to the 1 AD Safety at DSN 337-4-4833.

#### PART IX SAFETY AWARDS PROGRAM

#### 1. GENERAL

- a. 1st Armored Division, will establish, fund, and administer a safety awards program for their headquarters and units subordinate to them.
  - b. Program and budget safety awards annually.

- c. Qualification Standards. 1 AD qualification standards and types of awards are specified in this SOP. Commanders are encouraged to adopt similar criteria for their programs.
- **2. MACOM AWARDS** MACOM awards are outlined in AR 672-74 with the nomination routed through 1 AD Safety. These awards include:
- a. Award of Excellence in Safety Plaque. MACOM commanders award this plaque for a three-year, accident free record. See AR 672-74.
- b. Army Accident Prevention Award of Honor in Safety. MACOM commanders present DA Form 5758 for a two-year, accident free record. See AR 672-74.
- c. Army Accident Prevention Award of Accomplishment in Safety. MACOM commanders present DA Form 5775 to units for an accident free year. See AR 672-74.
- d. Commanding General's Special Safety Award. MACOM commanders present DA Form 5776 to units for exemplary safety performance. See AR 672-74.
  - e. Chief of Staff, Army, Award for Excellence in Safety
  - f. United States Safety Guardian Award (DA Form 5777)
  - g. U.S. Army Broken Wing Award (DA Form 5778 and Lapel Pin)
  - h. Director of Army Safety Special Award of Excellence
  - i. U.S. Army Aircrew member Safety Award (DA Form 1119-1)

### 3. HQ, 1st ARMORED DIVISION SAFETY AWARDS

- a. United States Army Certificate of Merit for Safety. DA Form 1118 is presented to individuals and units for outstanding achievement in accident prevention during activities such as tactical operations and training, equipment maintenance, fire prevention, life saving or rescue work, significant safety act, or other commendable contributions to safety activities. Units will provide their own certificates for unit level awards. 1 AD Safety will provide certificates for Division level awards. First award DA Form 1118 should be signed by the BN Cdr and the second award should be signed by the BDE Cdr in order for the soldier to receive promotion points. It is recommended that the third award be signed by the CG, 1AD or the 1 AD CofS for non-divisional units. The fourth and greater awards should be signed by, at least, the 1 AD Deputy Commanding General.
- b. United States Army Certificate of Achievement in Safety. DA Form 1119-1 (with 1119 wallet sized) is presented by commanders to individuals for specific achievements in safety. Units will provide their own certificates for unit level awards. V Corps Safety will provide certificates for Corps level awards. The BN Cdr should sign first award DA Form 1119-1 and the BDE Cdr in order for the soldier to receive promotion points should sign the second award. The third award is recommended to be signed by the CG of 1AD, 1ID, and 3CC respectively or the Corps CofS for non-divisional units. The fourth and greater awards should be signed by, at least, the V Corps Deputy Commanding General. Examples are drivers of Army motor vehicles (AMVs) and Army combat tracked vehicles (ACVs) who complete the following without an "at fault" military or civilian on duty accident or moving violation.

Awarding Level	Months *		AMV Miles	Tactical Vehicle	ACV Miles	MHE Hours
Battalion	12	OR	10,000	3,000	1,500	1,500

Brigade	24	OR	15,000	5,000	2,000	2,000
Division/DCG	36	OR	20,000	7,000	2,500	2,500
Corps	48	OR	25,000	9,000	3,000	3,000

<sup>\*</sup> In addition to time,  $\frac{1}{2}$  of mileage/hours in a category must be accumulated. Drivers are considered only if driving is on a routine basis.

### 4. PROCEDURES

- a. Commander's of 1 AD units falling under the responsibility of 1 AD Command Safety as per paragraph 1.a. this Part will:
- (1) Develop a log for accurate recording of Army motor vehicle miles driven by individual vehicle operators.
- (2) Recommend eligible drivers for appropriate awards through channels to the headquarters level whose commander will sign the certificate. For awards requiring V Corps level or higher signature, forward the request through Headquarters, V Corps, ATTN: AETV-S, Unit 29355, APO AE 09014 and enter awards received on individual's personal records.
- (3) Obtain award certificates DA Form 1119, 1119-1, and 1118 through publications channels. Higher awards will be handled by the awards proponent
- (4) DA Forms 1119-1, 1119, 1118 certificates will be prepared and presented by the appropriate level of command as stated above.
- (5) Submit to HQ, V Corps, ATTN: AETV-S, Unit 29355, APO AE 09014, requests for special safety awards for individual or unit actions contributing to safety and accident prevention.
  - (6) Present awards at an appropriate ceremony.
  - b. 1 AD Safety Office will:
- (1) Provide safety incentive awards to be awarded with certificates to units falling under 1 AD Safety's responsibilities in paragraph 1. b., this part.
- (2) Process Division level certificates and return to the requesting unit for award ceremonies.
- (3) Provide impact safety incentive awards during training and tactical operations and when employed in out of sector operations for observed safety actions or results enhancing mission and soldier safety to units outlined in paragraph 1., b., this part.

#### 5. AVIATION SAFETY AWARDS

- a. All requests for Broken Wing Awards must be sent through the Commander, V Corps, ATTN: AETV-S (Avn Safety Off), Unit 29355, APO AE 09014.
- b. The V Corps Safety Office will review and approve all requests for unit safety awards IAW AR 672-74, with supplements.
- c. Aviation brigades, regiments, battalions and squadrons are encouraged to implement innovative individual safety award programs for air crewmembers recognizing the accumulation of accident/violation free flying hours commensurate with the unit mission and flying hour program. These awards will be in 500-hour increments starting at 500 hours IAW AR 672-74.

d. In addition to the unit awards program, Corps level aviation safety awards will be presented starting at 3000 hours to aviators who have accumulated 3000 hours or more of mishap free flight duty. Mishap free flight duty is no human error Class A through C mishaps. Additional awards will be given in 500-hour increments IAW AR 672-74.

#### 6. INCENTIVE AWARDS PROGRAM

- a. The 1 AD Safety Office will maintain a Safety Incentive Awards Program that will reward personnel for potential contributions to the 1 AD safety program.
- b. These awards will cost less than \$7.00 per award and be provided on the spot to the soldier following the standard or making a contribution.
- c. A supply of incentive awards will be provided to the 1 AD command group for rewarding 1 AD personnel.
- d. Upon request, incentive awards may be provided to commanders of Division MSCs for their use in rewarding personnel.

#### PART X POV ACCIDENT PREVENTION PROGRAM

#### 1. GENERAL

- a. Army accident records show that more soldiers are killed, maimed, and injured in POV accidents than any other accident category.
- b. Driving privileges are not a right. USAREUR driving privileges may be temporarily suspended, administratively withdrawn, or permanently revoked. These actions are detailed in USAREUR Reg 190-1 and UR Pam 190-34.

#### 2. TRAINING

- a. Newly arrived personnel will receive adequate information on the dangers of driving and their responsibilities in Europe prior to being examined for an operators permit.
- b. Prior to holidays and extended weekends, special briefings by chain of command for all personnel planning to travel outside the immediate area, is highly encouraged.
- c. A remedial driver training course will be used by commanders anytime it is judged to be needed, and specifically when drivers have been determined to be at fault in an accident or assessed more than six traffic points under the system detailed in USAREUR Reg 190-1. The unit will teach these courses.

#### 3. ADMINISTRATIVE CONTROLS

- a. Commanders will institute a system to collect and maintain data on all POVs owned/ operated by assigned or attached personnel.
  - b. Data will be maintained using DA Form 3626. Information must be kept current.
  - c. The following information will be maintained:
    - (1) Name, rank of owner, operator license number and expiration date.
    - (2) POV description (year, make, model, color).

- (3) POV license number and expiration date.
- (4) Name of insurance carrier and date of expiration.
- (5) POV status (operational, non-operational).
- (6) Date of last inspection.
- (7) Remarks (accidents, moving violations, commander's actions, training, etc.).
- d. The following is the USAREUR Six Point Safety Program that will be used as a means to reducing POV accidents.
- (1) STEP ONE COMMAND EMPHASIS: I want unrelenting positive emphasis by leaders at all levels on POV safety. Assert your influence. Tools to assist you are available from the POV Risk Management Toolbox found on the DCSPER home page www.per.hqusareur.army.mil.
- (2) STEP TWO DISCIPLINE: Leaders will identify at risk soldiers and take action to modify their risky behaviors. All soldiers will be evaluated using the next accident assessment. The Next Accident Assessment tool is also available on the DCSPER home page High risk soldiers identified will be counseled and proactive measures taken to modify their behavior.
- (3) STEP THREE RISK MANAGEMENT: Integrate the risk management process and tools into your efforts. The automated POV risk assessment program, POV risk management toolbox and POV risk management training module are all tools available to assist in identifying hazards and suggesting controls.
- (4) STEP FOUR STANDARDS: Demand performance to standard and take decisive action when standards are violated. Our primary focus on the use of seatbelts, child restraints, and motorcycle safety equipment and constant emphasis on the dangers of drinking and driving must be continually supported by informed and responsible leaders. All leaders must continue to educate soldiers on the risks of speed, fatigue and alcohol and to enforce the standards in UR 190-1. Conduct mandatory vehicle safety inspections. Recognize units for 100 percent seat belt use and no DUI's.
- (5) STEP FIVE PROVIDE ALTERNATIVES: Schedule unit and community sponsored activities at locations to minimize or eliminate use of POVs. Provide transportation to events and maximize use of the designated driver program. Institute a unit ride program.
- (6) STEP SIX COMMANDERS ASSESSMENT: The first general officer in the soldier's chain of command will be briefed on all fatal accidents. The first colonel in the chain of command will conduct a comprehensive assessment of every fatal or serious injury (Class A and B) POV accident. Implement corrective and preventive measures and provide lessons learned to V Corps Safety.

#### PART XI HAZARDOUS MATERIAL & WASTE MANAGEMENT PROGRAM

- 1. **INTRODUCTION** The goals of the Army's Hazardous Material and Hazardous Waste (HM/HW) program are to reduce risk to public health and the environment, prevent pollution, and comply with applicable toxic substance regulations.
- **2. PURPOSE** This SOP is intended to assist commanders in complying with the governing program requirements for hazardous material and hazardous waste.

**3. SCOPE** This SOP applies to all division, brigade, battalion and company commanders. It outlines the responsibilities and major program areas for hazardous material and hazardous waste management. This SOP is not all-inclusive, therefore, all levels of personnel are required to have available and be familiar with the governing references provided below.

#### 4. REFERENCES:

- a. AR 200-1, Environmental Protection and Enhancement
- b. USAREUR 200-1, USAREUR Environmental Quality Program, Environmental
- c. FGS, Final Governing Standards

#### 5. ABBREVIATIONS AND TERMS

a.	HM -	Hazardous Material
b.	HW -	Hazardous Waste

c. SOP - Standard Operation Procedured. FGS - Final Governing Standards

e. E/HM/HW - Environmental/Hazardous Material/Hazardous Waste

f. NCO - Non-Commissioned Officer
 g. COSCOM - Consolidated Command
 h. BMO - Battalion Maintenance Officer

i. EQCC - Environmental Quality Control Committee

j. MOS - Military Occupational Specialty
 k PPE - Personal Protective Equipment
 l. CSCP - Community Spill Contingency Plan

m. HAZMIN - Hazardous Minimization
n. DPW - Department of Public Works

o. MOI - Method of Instruction

p. DRMO - Defense Reutilization and Marketing Office

q. MSDS - Material Safety Data Sheet
 r. SORT - Separate or Recycle Trash
 s. HAZCOM - Hazardous Communication
 t. 29 CFR 1910 Code of Federal Regulations

u. OEBGD - Overseas Environmental Baseline Guidance Document

v. SOFA - Status of Forces Agreement
w CSCP Community Spill Contingency Plan
x. ECAS - Environmental Compliance Assessment

y CWF Civil Works Facility

- **6. RESPONSIBILITIES:** Regulations AR 200-1 and UR 200-1 and the Environmental FGS address the responsibilities of commanders. To assist the commanders with their responsibilities,
  - a. Commander will:
- (1) Appoint an Environmental/Hazmat/Hazwaste (E/HM/HW) Management Officer and NCO on orders at company/detachment level and above. A copy of orders for brigade level and above will be furnished to the HQ, 1 AD Safety Office. Brigade, battalion and separate battalion level will be an officer. Company and detachment level can be a NCO (E-6 and above).
- (2) It is recommended that the officer appointed at the Brigade level be the S-4; the battalion level the S-4 BMO and the NCO appointee should have a vehicle maintenance or motor

- pool MOS. The appointee should have a minimum of one-year retainability with no long schools or training scheduled.
- (3) Comply with all environmental policies and legally applicable and appropriate Federal and local laws and regulations or country Specific FGS.
  - (4) Ensure required training for the E/HM/HW is completed and documented.
- (5) Ensure required training for all personnel who use, store, transport or manage HM/HW is completed and documented.
  - (6) Designate a member to attend the BSB EQCC.
  - (7) Provide required PPE for all personnel who use, store or transport HM/HW.
  - b. Environmental Compliance Officers will:
    - (1) Implement the Hazardous Communication Program (HAZCOM)
    - (2) Maintain a reference library that contains the above referenced regulations.
    - (3) Develop a SOP at the unit level, based on the applicable regulations.
    - (4) Ensure a CSCP is implemented IAW the requirements of the governing BSB.
- (5) Track HM/HW from the acquisition process up to final disposal and maintain records.
- (6) Conduct and maintain an up to date inventory of HM/HW storage locations and provide the BSB DPW environmental Office with data to update the HM/HW inventory list and storage locations.
- (7) Support the HAZMIN program by: <u>Managing inventory</u>: Only designated personnel purchase HM and only in minimum amounts necessary to complete the job. Monitor shelf life of HM and use oldest first. <u>Modifying Process</u>: Consider alternative methods to complete a job which would use less HM or eliminate HM in the process. For example, use of plastic beads to strip paint rather than use of a chemical. <u>Reducing Waste Volume</u>: Substitute HM with a less hazardous material. <u>Recover Waste</u>: Consider how HM may be reused in another process or if the left over HM can be used by other community users.
  - c. Environmental /Hazardous Material/Waste Management NCO's will:
- (1) Be familiar with the requirements of the BSB DPW MOI for disposal of hazardous waste.
- (2) Have a copy of and be familiar with the ASG/BSB HW Management Plan and the Spill Prevention and Cleanup Guide.
  - (3) Record all types and quantities of HW disposed of by contract or through DRMO.
- (4) Orient personnel working with the handling HM/HW on proper material categorization, and appropriate procedures developed to identify, label separate, handle, package, storage and disposal.
- (5) Ensure HW containers are properly labeled, and contain only that waste designated by the label.

- (6) Ensure proper storage and segregation of all HM/HW:
- (7) Clearly separate HW from HM and other non-contaminated substances.
- (8) Separate incompatible HM/HW by required distances and/or barriers.
- (9) Package, store, and transport hazardous wastes generated IAW HM management plan and Section XII of this SOP.
  - (10) Record and identify HW for each disposal site at all times.
- (11) Maintain a current, viable HM/HW management information program within the Command. An MSDS for each hazardous material must be maintained.
  - (12) Support the HAZMIN program by:
    - (a) Ordering/issuing minimum amount of HM to perform the task.
    - (b) Ordering HM substitutes when possible.
    - (c) Rotating stocks to ensure use prior to shelf life expiration.
    - (d) Cross checking inventories before reordering.
    - (e) Protecting stocks from damage by weather and improper handling.
  - (13) Support the communities SORT program.
  - d. Hazardous Waste Generators will:
- (1) Identify personnel routinely exposed (30 days or more per year) to HM/HW for required baseline physical examination and periodic medical surveillance. Contact the Base Support Battalion Safety Office for guidance on medical surveillance.
- (2) Ensure personnel who use, store, transport, or manage HM receive HAZCOM training; receive PPE and training on its proper use; know location of emergency spill response material/equipment; are trained on spill response procedures and use of the spill material/equipment; follow proper procedures when handling, storing or disposing of HM/HW; are encouraged to report workplace hazards and SOP/policy violations immediately to their supervisors.

### 7. MAJOR PROGRAM REQUIREMENTS

#### a. HAZCOM

(1) The HAZCOM Program is implemented according to AR 385-10 and 29 CFR 1910.1200. All personnel who use, store, transport or manage HM are required to receive HAZCOM training in compliance with the above regulations. A <u>written</u> HAZCOM Program is required.

#### b. HAZMAT

(1) The HAZMAT Program will be implemented IAW AR 200-1, UR 200-1 and the FGS. A SOP is required to be developed and effectively implemented by each unit IAW these regulations.

- c. HAZWASTE. The HAZWASTE Program will be implemented IAW AR 200-1, UR 200-1, (Chapter 6) and FGS, (Chapter 6).
- d. HAZWASTE MINIMIZATION. Waste minimization will be conducted IAW AR 200-1, section 5-4.
- e. TACTICAL FIELD/DEPLOYMENT SCENARIOS. Army deployments to field settings will be IAW UR 200-1, section 14-8, FGS or OEBGD, SOFA's, treaties, and international agreements.
- f. COMMUNITY SPILL CONTINGENCY PLAN. A Spill Contingency Plan will be developed and effectively implemented IAW AR 200-1, section 3-3 and UR 200-1, chapter 8
- g. MEDICAL. A baseline examination is required for all HAZMAT personnel per 29 CFR 1910.120 (q). Periodic medical surveillance is required per 29 CFR 1910.120 (f)
- h. ENVIRONMENTAL TRAINING. Training is required for all persons who use, store, transport, or manage HM/HW. The E/HM/HW Coordinator is responsible to ensure required training is conducted and documented.

### i. ENVIRONMENTAL QUALITY CONTROL COMMITTEE.

- (1) The EQCC is conducted by the governing BSB. The EQCC will act on the broad range issues. Per UR 200-1, section 12-8, the EQCC will be made up of members representing the command, operations, logistics, engineering, planning, public affairs, resource management, legal, safety and medical activities of or supporting the ASG.
- (2) Ensure a representative attends the quarterly EQCC. Ensure copies of minutes are kept on file.
- j. ENVIRONMENTAL COMPLIANCE ASSESSMENT SYSTEM. The ECAS is required per AR 200-1, section 15-9 and UR 200-1, section 12-5. The ECAS is designed to evaluate, achieve, maintain, and monitor compliance with environmental requirements. IAW these regulations, an External and Internal ECAS will be conducted as follows:
- a. <u>EXTERNAL:</u> To be conducted on a three year cycle, as a minimum, by a team of independent assessor not associated with the installation/Civil Works Facility (CFW).
- b. <u>INTERNAL</u>: To be conducted annually by the installation/CWF, with the exception of that year an external assessment is conducted. Deviation from this cycle requires appropriate MACOM justification and HQDA approval for military installations.
- c. All 1 AD units that are inspected will track the deficiencies identified by the ECAS team and track the corrective actions until completion.

#### PART XII FIRE PREVENTION AND PROTECTION

### 1. RESPONSIBILITIES IN FIELD AND DEPLOYED ENVIRONMENTS

- a. Commanders will appoint a fire marshal for each bivouac area.
- b. Fire marshals will conduct fire inspections IAW AR 420-90 para 6-9. For purposes of this paragraph, all tent and/or bivouac areas are considered extra-hazardous occupancy facilities.

- c. Fire marshals and safety officers will work together to ensure units provide a predeployment briefing that includes the fire prevention standards in this section.
- d. Develop and implement a field fire alarm system. A 15lb dry chemical fire extinguisher, shovel, and ax will be available at selected fire points for every eight tents.
  - e. Inform soldiers of the location of fire points.
  - f. Select and train personnel in operator maintenance of fuel systems.
- g. Ensure soldiers receive enough training to operate space heaters safely and are licensed according to AR 600-55. Soldiers who do not receive training and who are not licensed will be prohibited from installing or operating space heaters.
- h. Instruct soldiers not to place sealed water cans on heaters. Boiling water may cause a sealed can to explode because of increased pressure as the liquid changes to vapor.
  - i. Instruct soldiers not to place wet clothing within 24 inches of the stove.
  - j. Designate a fireguard for each tent.
  - k. Brief fireguards on fire hazards and conditions that may cause asphyxiation.
- I. Appoint a roving guard to conduct hourly inspections when several tents are erected in the same area. Guards will remove fire and asphyxiation hazards.

### 2. FIRE PREVENTION AND PROTECTION

- a. Commanders will establish and implement fire prevention and protection programs to provide maximum protection against fire hazards that endanger life and property. Commanders will appoint, in writing, Unit Fire Marshals and building Fire Wardens
- b. Fire protection for fixed facilities is a facilities engineer function. Tactical fire protection is the responsibility of the individual unit commander.
- c. Regulatory guidance in AR 420-90, National Fire Protection Association (NFPA) 10, Life Safety Code 101, USAREUR PAM 385-15, and section XI this SOP will be used to prepare a fire plan for troop occupied buildings.
  - d. Inspections.
- (1) Fire marshals and fire wardens should continuously monitor operations and work areas for poor housekeeping, violations of no smoking rules, improper use of flammable/ combustible liquids, etc. Facilities should be inspected at the close of business to ensure no fire hazards are present.
- (2) Check electrical outlets for cracked or missing covers, loose wiring, and evidence of smoke or heat damage, i.e. melting covers, crisp wall paper. Notify the building coordinator or supporting DPW contact if deficiencies are noted.
- (3) Ensure that only approved extension cords are used, and that they are free of cracks, cut insulation, and heat damage. Remove damaged electrical cords from service immediately.
- (4) Appliance wiring should be free of cracked, cut or melted insulation. Also check appliances for damaged or missing covers, plastic protective devices and heat damage. Remove from service immediately if defect is noted.

- (5) Ensure any unused appliance is unplugged when not in use.
- (6) The reproducible form in the back of AR 420-90 will be used for monthly inspection results.
- e. All sleeping areas (tents or buildings), if occupied longer than 30 calendar days will have a smoke detector installed in all rooms.
- f. All sleeping areas (tents or buildings), if occupied longer than 30 calendar days will be tested by an industrial hygienist for carbon monoxide levels. Rooms found to be below standards will have carbon monoxide detectors installed.
- g. During deployments all buildings and tents used for public assembly will have the maximum occupancy IAW Life Safety Code 101. This will be documented and posted 72 hours prior to any event taking place. This will be completed by a certified fire fighter or a civilian safety specialist (series 018).

#### 3. TENTS

- a. Tents for billeting personnel and storing unit equipment and supplies will be set in rows with a 3-meter clearance on all sides. A 9-meter clearance will be kept between a double row of tents and any other row of tents with frames.
  - b. Tents will be set up away from roads and trails. Tent ropes should not be crossed.
  - c. Tent areas will be level and free of potholes, sharp rocks, and other hazards.
- d. POL storage areas will not be located within 50 feet of tents. When possible, POL storage areas will be located at a lower elevation than bivouac areas.
  - e. Walking paths between tents will be planned and established.
  - f. Camouflage nets will not touch space heater stovepipes in tents.
  - g. Stovepipe flaps will be rolled back and secured before stoves are operated.
  - h. One 10lb dry chemical and one water fire extinguisher is required per GP medium tent.
  - i. One pressurized water fire extinguisher is required per GP small tent.
- j. A fire guard is required when using a tent heating stove at night. If several tents are set up a roving fire guard may be used. The roving fire guard will check each tent once per hour for fire hazards, proper stove operations, and asphyxiation hazards.
- **4. INSTALLING AND OPERATING HEATING STOVES** TM 10-4500-200-13 provides operating instructions and preventive maintenance checklists for using type I and II space heaters. Personnel will consult TM 10-4500-200-13 when installing space heaters. Additional fire safety standards for installing and operating tent space heaters are as follows:
- a. Tent stoves will be placed on a noncombustible base or a sandbox no smaller than 36 by 36 (by 4 inches when sand). When metal-base trays are used, there will be 2 inches between the bottom of the stove and the metal tray. Tent stoves will be installed at least 4 feet from tent walls.
  - (1) All operators will be trained and licensed to operate any type of heating stove.

- (2) Equip tent stoves with float valves and overflow outlets with a hose to drain the overflow.
- (3) Fuel the M1941 potbellied stove with JP8 only. Fuel the M1950 Yukon stove with gasoline only.
  - (4) Use at least two sheet-metal screws or rivets to secure the ends of each pipe section.
  - (5) At least two pipe sections will extend above a tent peak.
  - (6) Install spark arresters on model M1941, type I, solid-fuel space heaters.
- (7) Install a draft diverter at the top of exhaust pipes of M1941 type II and M1950 Yukon liquid-fuel space heaters.
  - (8) Keep a 2-inch ventilation space between the exhaust pipe and tent.
- (9) Use three guy wires to secure exhaust pipes. These wires should be attached to tent lines.
- (10) Only use 5-gallon cans as fuel supply containers. Locate fuel supplies at least 5 feet from the outside wall of a tent. Dike fuel containers to prevent fuel from spreading to space heaters and will be painted with 1-inch letters in a color contrasting with the color of the can. The words "FUEL OIL" or "GASOLINE" will be painted on the can. These cans will have pouring spouts.
- (11) The tent flaps for the stovepipe openings will be tied back to avoid contact with the hot pipes. These ties are combustible.
- (12) The fuel can, fuel line connection, and carburetor will be checked for leaks after changing fuel cans. Leaks will be corrected before continuing operation.
- (13) Turn off space heaters and allow for at least 30 minutes to cool before refueling or relighting.
- (14) Check fuel systems (incl. fuel tank lines and connections of heating devices) daily for leaks and malfunctions. Only qualified maintenance personnel will make repairs. Equipment will be turned in through supply channels when local maintenance personnel are unable to make repairs.
  - (15) Heating equipment will not be modified locally.
- (16) Keep combustible and flammable materials at least 50 feet from space heaters to prevent accidental ignition or explosion.
- (17) Ammunition, explosives, simulators, pyrotechnics, and combustible or corrosive materials will not be stored in tents with stoves or other heating sources.
- b. Gasoline Lanterns. Tent fires, explosions, and personal injury may occur if a lantern is not operated or maintained properly. Light sets are the preferred method for tent lighting. Leaders will:
- (1) Inspect lanterns for loose, damaged, or missing parts. Nuts and caps on lanterns will be tightened by hand.
- (2) Do not place lanterns near space heaters. The pressure seal on lanterns may rupture, allowing fuel to escape.
  - (3) Inspect ventilator hood openings to ensure the openings are free of obstructions.

- (4) Ensure the pump leather is lubricated properly and is in good condition.
- (5) Ensure the filler cap gasket is on and is in good condition.
- c. Smoking areas will be no closer than 50 feet of any flammable substance.

#### 5. FIELD MESS FACILITIES

- a. General. Safety considerations and layout for field mess operations are in FM 10-23. Commanders will brief mess personnel on safety guidance in FM 10-23, chapter 12; and this pamphlet. Safety guidance includes proper operating procedures for M2 burner units, storing flammable liquids, and controlling ignition sources. Soldiers will change clothes before igniting burners if they spilled fuel on their clothing while refueling any type of equipment described in b through d below.
- b. M2 Burner Units. Only properly trained and licensed (AR 600-55) mess personnel will operate M2 burner units (TM 10-7360-204-13&P). Soldiers operating M2 burners will
- (1) Ensure fuel tanks are at least 50 feet from open flames or other flammable sources before filling them.
  - (2) Store burner fuel (gasoline) at least 50 feet outside of kitchen enclosures.
- (3) Fill tank at least 50 feet from lighting point and not fill a tank while a flame is burning or when a burner is hot.
- (4) Wipe up spilled fuel immediately and dispose of fuel soaked material in proper metal container.
- (5) Not operate a burner when the pressure gauge reaches or exceeds 25 pounds per square inch or is in the "red" area.
  - (6) Not release fuel tanks until the burners have cooled (escaping gas vapor can ignite).
  - (7) Not tighten joints while a burner is operating.
  - c. Immersion Heaters. Operators will:
    - (1) Be licensed (AR 600-55) and trained to operate an immersion heater.
    - (2) Know the type of heater they are working with.
- (3) Check TM 5-4540-202-12&P or TM 10-4500-200-13 for preheating and lighting instructions.
- (4) Ensure ventilating pipe seams are aligned and are facing away from where the user will stand.
  - (5) Keep a fire extinguisher (dry chemical) close to equipment.
  - (6) Choose a level, sheltered site for the corrugated cans.
  - (7) Ensure exhaust gases are funneled outside in pipes when a heater is in a closed space.
- (8) Wipe up spilled fuel immediately and dispose of fuel soaked material in proper metal container.

- (9) Ensure the valve ends of fuel tanks are dry and free of fuel.
- (10) Ensure there is no fuel in the combustion chamber of a heater before the burner is lit.
- (11) Ensure water is at least 3 inches above the top of a combustion chamber.
- (12) Not hold lit torches under fuel valves to wet torches with fuel.
- (13) Not allow fuel to flow in a steady stream.
- (14) Ensure the burner assembly is in the burner compartment before lighting a heater.
- (15) Turn in defective heaters to supporting maintenance facilities.
- (16) Use leaded or white gas for fuel. Diesel fuel will not be used.
- (17) Not solder any part of a heater.

#### 6. FIRE PREVENTION STANDARDS

- a. Signs that read "No smoking within 50 feet," in red letters on a white background, will be posted at POL and ammunition storage areas.
- b. FM contains POL storage and handling procedures. POL vehicles will be bonded and grounded at field locations. Fire extinguishers will be located outside of POL points (storage locations).
  - c. Privately owned heating and cooking devices will not be used in tents and vehicles.
  - d. Smoking is prohibited within 50 feet of vehicles carrying explosives or flammable fuels.
  - e. Fuel cans will have serviceable gaskets.
  - f. Gasoline will not be used as a cleaning solvent or a fire starter.
  - g. Personnel will:
- (1) Ensure areas in and around vehicles, tents, buildings, and storage areas are clean. Cigarettes will be extinguished completely before discarding. When butt cans are not available, personnel will field-strip cigarettes.
- (2) Not smoke in or around fuel, ammunition, and other areas where indiscriminate smoking could cause a fire or explosion. Personnel will not smoke in tents, beds, or sleeping bags.
- h. German law prohibits open fires (incl. smoking) in forests, woods, and other locations where fires may present a hazard.
- i. Only trained personnel will install electrical wiring and equipment. Circuit breakers and fuses will not be bypassed or replaced with those having higher amperage. The current will be turned off until trained personnel correct faults in electrical wiring (for example, short circuits, overheating, exposed conductors, repeated tripping of the circuit breaker, and blown fuses). Lamp fixtures will be supported so that they are not suspended directly by electrical connections. Ground fault circuit interrupters will be installed while operating in a damp environment. When working with electrical circuits, use lockout/tag out procedures according to OSHA Standard 29 (FR) 910.

- j. Gasoline in portable containers will be stored in stacks. Each stack will:
  - (1) Not exceed 1,000 gallons.
  - (2) Be at least 5 feet from the next stack.
- (3) Not be closer than 50 feet to occupied tents, buildings, warehouses, or combustible storage areas.
  - (4) Be located at lower elevations than bivouac areas, when possible.
- k. A daily working supply of lubricants with a flash point of more than 100 degrees (°) Fahrenheit (F) may be stored in shops and maintenance areas. Gasoline and other flammable fuels with a flash point of 100 °F or less will not be stored in tents, buildings, or other structures with closed sides.
  - I. Gasoline and other flammable liquids will not be used to start solid fuel fires.

NOTE: Refuel the M2 cooking stove only in an open, well-ventilated area. Install a heat shield before a M2 burner is operated.

- m. Field stoves and ranges with attached fuel tanks will be allowed to cool off for at least 30 minutes before being refueled.
- n. Vehicles, trailers, and temporary storage areas containing packed or bulk flammable and combustible liquids will be located
  - (1) Twenty-five feet from vehicles loaded with explosives and ammunition.
- (2) Fifty feet from structures and other vehicles when the amount of flammable liquid is 750 gallons or less.
- o. Incendiary devices for destroying classified material will be stored so that any accidental ignition will not be hazardous. Installing explosives and pyrotechnics for additional security of classified material is prohibited.
- p. Do not throw ammunition simulators and similar devices (for example, pyrotechnics) at or near people or into vehicles, structures, tents, and other enclosures.
- q. Commanders will designate and mark authorized smoking areas clearly. Grass, leaves, and other combustible materials will be removed from designated smoking areas. Butt cans will be provided. Supervisors will instruct soldiers to empty butt cans into trash containers only after smoking materials have been extinguished completely. A 2½ gal water pressure fire extinguisher will be provided.
  - r. Vehicle operators will turn off vehicle motors while vehicle is being refueled.

# **7. FIELD MAINTENANCE OPERATIONS** To prevent fires during field maintenance, commanders will:

- a. Post "no smoking" signs in shop areas. Smoking is permitted only in designated areas. Smoking is not permitted within 50 feet of vehicles or stored flammables.
- b. Store paint, POL products, and cleaning solutions only in designated areas and use secondary containment.

- c. Not use gasoline as a cleaning solvent.
- d. Separate and store dirty and oily rags in covered metal containers.
- e. Ensure vehicles are parked at least 15 meters from tents and buildings. Vehicles will not block exits.
- f. Ensure equipment is not refueled inside tents or buildings, or when an engine (incl. power generators, small engineering equipment, and Herman Nelson heaters) is running or hot.
- g. Ensure personnel clean areas to reduce fire and other safety hazards. The BSB fire department will conduct "train the trainer" classes for selected unit personnel in the proper use of fire extinguishers. These unit trainers will then give training to the rest of the unit.
- h. Ensure no smoking within 50 feet of any open flame heaters or other flammable materials. Smoking is prohibited inside any maintenance facilities to include tents.
- i. Mark all fuel cans with the contents, with one-inch letters on the outside of the container and in a color that sharply contrasts with the color of the container.

#### PART XIII TRANSPORTATION/MOTOR VEHICLE SAFETY PROGRAM

#### 1. TRANSPORTATION SAFETY FOR VEHICLES CARRYING HAZARDOUS CARGO

- a. Commanders will:
  - (1) Establish a hazardous material transportation safety program.
- (2) Ensure that the requirements of USAREUR REG 55-4, Appendix A, Table C-1, DOD 4500.9R, 49 CFR 397.0, SOFA, and this SOP are complied with prior to movement of hazardous material. In addition, guidelines in Part VI apply to radioactive material.
  - (3) Select only mature and responsible hazardous cargo certified drivers.
  - (4) Select the least traveled roads, whenever possible.
  - (5) Avoid moving ammunition and explosives during peak traffic periods, if possible.
  - b. Hazard classification.
- (1) Hazard classifications for explosives are contained in UR 55-4, Joint Hazard Communication System(JHCS), and 49 CFR 172.101.
- (2) Hazard classification for radioactive material are contained in TB 43-0116 and 49 CFR 172.101.
- (3) Hazard classifications for other hazardous material are contained in UR 55-4 and 49 CFR 172.101.
- c. Documentation. The hazard class on the Government Bill of Lading (GBL) is required information on the DD Form 836 (AE), Special Instruction to Motor Vehicle Drivers. A copy of the

AE 55-4, series forms Accident Information Sheet (AIS), representing the hazard class of the GBL will be provided by the unit certified hazardous material personnel in the shipping section or by Quality Assurance at the time of loading.

#### d. Chemical hazards.

- (1) Certain items produce toxic or noxious fumes. These items require professional fire fighting, or HAZMAT accident response personnel to wear suitable protective masks and suits. Refer to AISs and notify military and local authorities immediately. Ammunition producing clouds of tear producing agents, and signaling and screening smokes fall into this category.
- (2) Ammunition filled with white phosphorous or plasticized white phosphorous requires special fire fighting techniques.
- (3) Examples of chemicals found in ammunition are hexachloroethane (HC), riot control agents (CS), and thermite.
- (4) One or more types of chemical ammunition may be present in a load. Be aware of the chemical hazard of a load. Read the DD Form 836 (AE) and AIS.

#### e. Shipping compatibility.

- (1) Mixing ammunition, explosives, chemicals and certain radioactive substances that are incompatible is prohibited by US Army, host nation, and international regulations, as well as presenting an undue safety hazard.
- (2) TM 9-1300-206, Ammunition and Explosive Hazards, defines 12 storage compatibility groups. Throughout USAREUR these compatibility groups are also applied for all shipping purposes.
- (3) USAREUR regulation 55-4 and 49 CFR parts 172, 174, and 177 give guidance for mixing hazardous chemical loads.
  - (4) USAREUR regulation 385-12 and AR 11-9 give guidance for radioactive material.
  - f. General requirements for vehicles hauling hazardous cargo.
- (1) When traveling on Host nation roadways or when participating in training and tactical exercises on training areas, speeds will be in accordance with USAREUR Pamphlet 385-15. Trucks whose maximum allowable weight exceeds 2.8 metric tons (3.08 US tons) will maintain a minimum distance of 50 meters from the preceding vehicle.
- (2) Vehicle must be able to pass a safety inspection conducted by a qualified inspector. The inspection points are covered in DD Form 626, Motor Vehicle Inspection (Transporting Hazardous Material).
  - (3) Vehicle must be equipped with:
    - (a) Two highway warning triangles with red colored reflectors.
    - (b) Two amber colored electric flashing lamps equipped with self-contained batteries.

- (c) Sufficient tools to make minor repairs.
- (d) Two wheel wedges (chocks) appropriate to the weight and size of the wheels.
- (e) Two full 10BC fire extinguishers, fully pressurized and readily available for use.
- (f) Eye wash liquid bottle with fresh water.
- (g) Safety goggles and acid resistant gloves and shoes/overshoes.
- (4) Each vehicle must have a hazardous cargo certified driver and a co-occupant who is knowledgeable in hazardous cargo transport.
  - (5) Do not allow smoking or use of matches or lighters within 50 ft of a loaded vehicle.
- (6) Obey Host Nation traffic regulations. Whenever possible, avoid congested residential or business areas.
- (7) Do not permit unauthorized persons or persons suspected to be under the influence of drugs or alcohol to approach ammunition.
- (8) During loading or unloading operations, set the brakes. If the vehicle is on a grade, at least one wheel must be chocked. Wheels of trailers must be chocked at all times when separated from the tractor.
  - (9) Shut the motor off while the vehicle is being loaded or unloaded.
- (10) During rest stops, do not park vehicle within 300 ft of a bridge, tunnel, dwelling, or where personnel congregate. Driver or co-driver who remain within 100 ft with an unobstructed field of view must attend vehicle.
- g. Accident procedures for vehicles carrying hazardous cargo. In case of an accident, the following actions should be taken:
- (1) Set the brake, turn off ignition, remove GBL & AIS sheets, and block vehicle to prevent movement.
- (2) Warn motorists of existing highway hazard. Set up highway warning triangles and flashing amber lamps.
  - (3) Aid injured personnel and remove to safe area if medically possible.
  - (4) Notify the unit and the nearest police, military and host nation.
  - (5) Call for an ambulance, if necessary.
  - (6) Contain spills is safe to do so.
  - (7) Prevent smoking or the use of matches or open flame in the immediate area.
- (8) Do not move damaged cargo or permit others to do so unless directed by Host Nation police or fire department personnel.
  - (9) Do not make oral or written opinions to claimant or agents concerning liability.
  - (10) Accident reports will be done IAW Part VII of this SOP and AR 385-40.

- h. Breakdowns for vehicles carrying hazardous cargo. In case of a breakdown, take the following action:
- (1) Move vehicle 5 ft from traveled portion of public roadway or at least 300 meters from inhabited buildings if possible.
  - (2) Set up highway warning triangles and flashing amber lamps.
  - (3) Contact the unit for aid.
- (4) Minor repairs may be carried out providing they are without risk to personnel due to fire or other hazard.
  - i. In case of fire on vehicles carrying hazardous cargo, the following actions should be taken:
- (1) If any part of the truck outside of the actual contents catches fire, take truck to a clear or uninhabited area if practical.
  - (2) Driver must ensure that the ignition is shut off and the fuel cutoff valve closed.
- (3) Attempt to put fire out immediately with hand extinguishers or other available means without self-endangerment from fumes or possible explosion.
- (4) Inform fire department of approach distances. The safe distances for fire fighting personnel are listed in Appendix L of AR 55-355. Inform firemen of nature of cargo and whether water may be used.
- (5) Fight fire until the flames reach the cargo or contained fuel supply, at which time firemen and other personnel should be withdrawn to a safe distance as specified in fire fighting instructions provided on DD Form 836 (AE).
  - (6) As soon as practical notify the nearest military installation and the unit.
  - (7) If in convoy, other trucks must proceed to a safe distance.
- j. The appropriate AE Form 55-4 (AIS) must be issued to drivers of ammunition vehicles in addition to the DD Form 836 (AE). The AE Form 55-4s list cargo characteristics, dangers, protective equipment and emergency procedures for the specific classes of ammunition. Three each AE Form 55-4 is required for every load. One copy is to be kept in the vehicle cab, and one each is to be placed behind both the front and rear placards in flame retardant, watertight containers.

# 2. WHEELED AND TRACKED VEHICLES GENERAL REQUIREMENTS Commanders will ensure:

- a. Army motor vehicle operators are selected, trained, tested, and licensed to operate vehicles (incl. tracked vehicles) in USAREUR according to
  - (1) AR 600-55 and USAREUR Supplement 1.
  - (2) The technical manuals (TMs) for the specific vehicles they are operating.
  - (3) USAREUR Pamphlet 190-34.

- b. Drivers of wheeled vehicles carrying hazardous materials will be qualified according to USAREUR Regulations 55-1 and 55-4 (Draft).
  - c. Convoy commanders or senior persons, as appropriate, will
    - (1) Properly and immediately place emergency warning devices.
    - (2) Illuminate stopped vehicles.
- d. Vehicles participating in exercises have received appropriate mechanical inspections. For example, before tracked vehicles are deployed or operated on public roads, the track pad connecting pins of each tracked vehicle must be checked and replaced as necessary.
  - e. Safety-related deficiencies on vehicles have been corrected before an exercise.
  - f. Vehicle inspectors pay particular attention to
    - (1) Brakes.
    - (2) Directional signals.
    - (3) Exhaust system.
    - (4) First aid kits.
    - (5) Fuel system.
    - (6) Headlights.
    - (7) Heating system switch position before operations.
    - (8) Reflectors.
    - (9) Seat Belts (if installed).
    - (10) Taillights.
    - (11) Tires.
    - (12) Trailer hitch and electrical and air hose connections, as applicable.
    - (13) Warning triangles.
    - (14) Windshield wipers.
- g. Built-up wheeled vehicles meet the standards in USAREUR Regulation 385-55, Appendix G.
- h. The kevlar helmet policy is enforced. The wearing of Kevlar helmets can save lives and reduce injuries in wartime and peacetime. The US Army Aeromedical Research Lab (USAARL) analyzed the wearing of the Kevlar helmet and the analysis indicated that the wearing of the helmet could result in a net reduction of 19 percent in injuries sustained in a motor vehicle accident. The wearing of the Kevlar helmet can also reduce the potential for head injuries in situations where overhead hazards are present.

- (1) Soldiers will wear kevlar helmets, with the chinstrap properly secured, under the following conditions:
  - (a) When driving or riding in a tactical (M series) vehicle during field exercises.
- (b) When driving or riding in a non-tactical vehicle participating in training exercises when the Kevlar is designated as part of the duty uniform.
- (c) During Army operations whenever overhead hazards are present (i.e. railhead operations and combat construction projects).
- (2) Combat vehicle crewmembers will wear the combat vehicle crewman helmet and be connected to the vehicle's intercom system at all times during the operation of combat vehicles. Combat vehicle passengers will wear the Kevlar helmet at all times during the operation of combat vehicles.
- i. Ground guides are used when backing wheeled and tracked vehicles. USAREUR Regulation 385-55 contains ground guiding standards. Ground guides will not stand between the vehicle being guided and another object where an inadvertent engine surge or momentary loss of vehicle control could pin guide between vehicle and object to cause injury or death. The vehicle driver will stop the vehicle immediately if:
  - (1) He or she loses sight of the ground guide.
  - (2) The ground guide is standing dangerously between the vehicle and another object.
- j. Procedures are followed for ground-guiding engineer vehicles operating at supervised or controlled access construction sites. Before starting vehicle engines, drivers of graders, bulldozers, and other engineer vehicles will
- (1) Walk around the vehicle to ensure the area is free of obstructions. Ground guides are not required to back engineer equipment operating at supervised or controlled access construction sites.
- (2) Sound the vehicle horn before backing or ensure the automatic backup alarm is operational.
- k. Drivers of engineer vehicles operating outside supervised or controlled access construction sites use the standards and number of ground guides required for vehicle types in USAREUR Regulation 385-55.
- I. Wheeled and tracked vehicles, trailers, and towed equipment are marked at the rear with retroreflective red and yellow delineator plates, according to USAREUR Regulation 385-55.
- m. Exterior radio antennas have been tied down to a height of no more than 13 feet and at least 8 feet from the ground before movement. Antenna tips (national stock number (NSN) 5800-00-437-2363) will be installed when applicable. Secure antennas under the clip and ensure they are clipped from below in the quick release position.
- n. Soldiers do not ride on cargo in cargo areas of wheeled vehicles. Soldiers riding in cargo areas will sit on seating platforms or individual seats. Soldiers being transported in cabins or cargo areas of wheeled vehicles will wear seat belts, if installed. Drivers will not wear load-bearing equipment when equipment obstructs their duties as a driver.
- o. Wheeled vehicle tailgates are locked in the up position. If installed, restraining straps extending across rear cargo beds will be secured before vehicle movement.

- p. Soldiers are not transported on top or on the sides of tracked vehicles. Soldiers will sit in crew member compartments, use available seat belts, and wear Kevlar or crew member helmets.
- q. Army wheeled vehicles are equipped with, and drivers use, chock block pairs when parked on inclines or when maintenance is being performed. If chock block pairs have not been issued, they should be made locally using 8-inch wood stock cut at 45 degree angles. Use chock blocks as pairs, placing one block in front of and one block behind the tire being chocked.
- r. Drivers of wheeled vehicles do not wear protective masks or night vision goggles on public roads and access roads that lead to and from training areas.
- s. Broken-down vehicles are moved as far as possible to the side of the roadway. Special precautions will be taken to warn approaching drivers of potential danger when vision is limited (incl. posting guards and reflectors). Military personnel have no authority to direct civilian traffic on public highways. Posted guards must wear reflective vests and will warn drivers of traffic accidents, oversized and broken-down vehicles, and other hazards on highways. Host nation (HN) police may be called for assistance by using an orange emergency telephone. Black arrows on roadside distance posts point in the direction of the nearest telephone. Under an exemption issued by the German Government, disabled U.S. Forces vehicles may be towed on autobahns beyond the next point of exit. A copy of the exception permit, consisting of the basic permit and three supplements (28 May 82, 16 Nov 84, and 29 Dec 87), must be carried on the towing vehicle.
  - t. Maximum speeds for all driving conditions will be observed (see Table 1 below).
  - u. Posted speed limits are not exceeded.
  - v. Procedures are established to control vehicle operations during adverse road conditions.
- w. Ensure drivers for single-vehicle missions (non-convoy) are selected carefully. Maturity, experience, and driver fatigue will be considered. Possession of DA Form 348 (Equipment Operators Qualification Record (Except Aircraft)) is the prerequisite heavy-vehicle or hazardous-cargo driver training.
- x. Senior vehicle occupants are briefed and understand their duties and responsibilities. USAREUR Regulation 385-55, appendix B, and paragraph 70 this SOP list senior occupant responsibilities.

Table 1
Maximum Speeds for Normal Driving Conditions
(USAREUR PAM 385-15)

### SPEED LIMITS FOR NON-TACTICAL VEHICLES (mph/KPH)

NTVs under 7,000 GVW (for example, s		Other Highways	Roads
cargo trucks, carryalls, panel trucks, TD/ authorized vehicles)	31/50	65/105	60/100
EXCEPTIONS			
NTVs with trailers Buses with passengers seated Buses with passengers standing	31/50 31/50 31/50	50/80 50/80 Not authorized	50/80 50/80 Not authorized

NTVs over 7,000 GVW (for example, truck stake, wrecker, truck tractor, semi-trailer, water tanker) 31/50

31/50 50/80 37/60

### SPEED LIMITS FOR TACTICAL VEHICLES (mph/KPH)

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Otilei	Cities	Highways	Roads
Trucks, ¼- to 1¼-ton (with or without trailers, incl. HMMWVs and CUCVs)	31/50	50/80	37/60
Trucks and truck tractors, 1½-ton and larger (with or without trailers)	25/40	50/80	37/60
Track-laying vehicles	12/29	31/50	25/40
M939 5-ton vehicles	25/40	40/64	40/64
NOTE: Sand and Snow will be 25/40 and	d Icy co	nditions will	be 12/19
Oversized, overweight, and towed vehicles.	12/29	31/50	25/40
Trucks transporting ammunition, explosives, and dangerous cargo	25/40	50/80	37/60
Columns (excl vehicles that might further restrict speed)	31/50	50/80	50/80

#### NOTES:

- o The above speed limits will be observed unless a lower speed limit is posted.
- o For vehicles carrying hazardous cargo:
  - a. If visibility is less than 50 meters, the driver must stop at the nearest parking area until visibility improves.
  - b. If a vehicle weighing more than 2.8 tons and carrying hazardous cargo is traveling faster than 50 KPH, it must maintain a distance of at least 50 meters from the vehicle in front.
- y. All vehicles will have delineator plates and reflective tape IAW UR385-55.

#### 3. M939 5-TON VEHICLES

- a. A large number of driving accidents have occurred while operating/driving the M939 series 5-ton vehicles. The cause of these accidents is commonly the result of the vehicle operators driving too fast for the conditions and/or locking the wheels when attempting to stop the vehicles.
- b. The air brakes of the M939 series vehicles are very sensitive when the vehicles are lightly loaded, empty, or when driving on wet/slippery pavement.
- c. The operator must gradually apply the brakes when stopping the vehicle. "overbraking" will lockup the rear wheels. Locking the wheels may cause the engine to stall which leads to loss of steering. Any of these situations can lead to: loss of vehicle control often resulting in collisions, jackknifing, and/or rollovers.

d. Maximum safe operating speeds:

(1) Highway and secondary roads: 40 mph (64 kph)

(2) Cross country roads: 35 mph (56 kph)

(3) Sand and snow: 25 mph (40 kph)

(4) Icy conditions: 12 mph (19 kph)

- e. Do not drive too fast for road or weather conditions. The maximum safe speed limit for highway is 40 mph. Don't tailgate. Always maintain a safe following distance. Stopping of the M939 family of vehicles can be adversely affected by poor road/weather conditions, especially if your vehicles is lightly loaded. Drive at a slower speed if conditions call for it. Death or injury to personnel or damage to equipment may occur if excessive braking is used under these conditions.
- f. Do not use hand throttle while driving. Hand throttle will not disengage when brakes are applied.

#### 4. WHEELED AND TRACKED VEHICLES CREW REST AND SAFE DRIVING

- a. AR 385-55 states drivers will not drive an Army wheeled or tracked vehicle for more than 10 continuous hours. Commanders should restrict driving periods when adverse road or weather conditions exist. Other factors, such as amount of driver training, type of vehicle, and availability of assistant drivers, also should be considered before mission execution. Unit commanders will develop, approve, and enforce unit crew rest and assistant driver scheduling policies using the guidelines in USAREUR Regulation 385-55. Unit policies will include the following requirements:
- (1) A combined duty period will not exceed 12 hours in a 24-hour period without at least 8 consecutive hours of rest.
- (2) A qualified assistant driver will be assigned to a vehicle when more than 10 hours are needed to complete operations.
  - (3) A driver will have six hours uninterrupted sleep within 12 hours of convoy SP time.
  - b. Drivers will
- (1) Take 15-minute breaks after every 2 to 3 hours of driving or after driving every 100 to 150 miles (160 to 240 kilometers), whichever comes first.
  - (2) Inspect their vehicles and ensure equipment and cargo are secure during breaks.
  - (3) Take 1-hour meal breaks.
- (4) Not use headphones or earphones while driving Army motor vehicles. The driver and passengers are allowed to wear hearing protection devices IAW Technical Bulletin (TB) MED 501.
- (5) Not consume intoxicating beverages within 8 hours before scheduled duty or during normal duty.
  - (6) Not eat, drink, or smoke in an Army vehicle while it is moving.
  - c. Commanders may determine that additional rest periods are necessary when

- (1) Drivers may encounter unusually poor weather or road conditions.
- (2) Hazardous materials are being transported.
- (3) Drivers will be involved in prolonged or unusually difficult exercises or operations.

#### 5. OPERATING TRACKED VEHICLES

- a. General. Commanders will ensure tracked vehicles are escorted according to the requirements in USAREUR Regulation 55-1. The escort vehicle
  - (1) Will follow tracked vehicles by 100 meters on high speed (autobahn) roads.
  - (2) Will lead tracked vehicles by 100 meters on secondary roads.
- (3) May be a single vehicle with a rotating amber warning light (RAWL) if the vehicle being escorted has a functional RAWL (USAREUR Reg 55-1).
  - (4) Will be marked at the rear with retro-reflective red and yellow delineator plates.
- b. Ground Guiding Tracked Vehicles. Two ground guides are required to guide tracked vehicles. If only one ground guide is available, a tracked vehicle may only be guided forward. USAREUR Regulation 385-55 provides ground guiding standards.
- c. Engineer Vehicles Operating at Supervised or Controlled Access Construction Sites. Before starting vehicle engines, drivers of graders, bulldozers, and other engineer vehicles will walk around the vehicles to ensure the area is free of obstructions. Ground guides are not required to back engineer vehicles operating at supervised or controlled access construction sites. Drivers of engineer vehicles, however, will sound vehicle horns before backing. The sounding of horns before backing will be SOP while operating at supervised or controlled access construction sites. Engineer vehicles operating outside supervised or controlled access construction sites will use the standards and number of ground guides prescribed in USAREUR Regulation 385-55.
  - d. Safety Requirements. Commanders will ensure:
- (1) Drivers of tracked vehicles do not wear protective masks during operations on public roads.
- (2) Drivers use parking lights and RAWLs when tracked vehicles are stopped on or near public highways.
- (3) Personnel warn approaching motorists of a stopped vehicle by turning on the vehicle's warning lights.
- (4) Tracked vehicle commanders use extreme caution and yield the right-of-way when making left turns on public roads.
  - (5) Disabled tracked vehicles being towed are escorted and lit properly.
- (6) Highway warning devices, including two warning triangles, are issued to every vehicle and are used in emergencies according to HN requirements.
- (7) Tracked vehicles are not started by towing. Slave cables with threaded male-to-female couplings will be used. Bare cable leads will not be used. Only vehicles parked side by side may be joined with slave cables. Vehicles parked front to front will not be joined with slave cables.

- (8) Equipment stored in a vehicle is secured.
- (9) Leaders enforce the wearing of appropriate hearing protection devices and protective headgear. Decals that state "hearing protection required" will be placed in the crew compartments of tracked vehicles.
- (10) Tank commanders alert the driver and crew and ensure they are out of the way before moving a gun turret.
- (11) Observation personnel in tracked vehicles stay low (not higher than uniform name taglevel on the rim of the hatch cover).
  - (12) Tracked vehicle ramps are not lowered until the rear of the vehicle is clear.
  - (13) Safety latches are installed on tracked vehicles (excl M548, M667, and M578).
  - (14) Crew members:
    - (a) Wear combat vehicle crewman helmets when operating tracked vehicles.
    - (b) Wear combat vehicle crewman uniform systems during live-fire exercises.
    - (c) Insert the safety pin when a vehicle is driven with the hatch open.
    - (d) Shake closed hatch covers to ensure they are locked.
    - (e) Do not grip the edge or rim of an open hatch.
- (15) Personnel are briefed and trained on emergency procedures to be taken if a tracked vehicle overturns (for example, crew members will not jump from the vehicle but will quickly drop inside and take a secure hold).
- (16) Personnel enter armored personnel carriers only through the rear door or ramp. Climbing on tracked vehicles will be restricted to mission-essential activities.
- (17) Heaters in tracked vehicles have no leaks in the heater or exhaust ducts. At least one hatch will be open to prevent carbon monoxide buildup.
  - (18) Operators are at the controls when the engine of a tracked vehicle is running.
- (19) Fire extinguishers will be checked daily during the PMCS and any fire extinguisher found to be missing the security device, gauge out of green, or any other damage will be removed from service and be replaced.
  - (20) Fire extinguishers without gauges will be replaced after five years of service.
  - (21) Operators will be trained on the operations and maintenance of the fire extinguisher.

#### **6. TOWING TRACKED VEHICLES** Commanders will ensure:

- a. Vehicles are not towed if they can be repaired on site.
- b. The decision to tow a vehicle is made by one of the following based on the risk assessment:
  - (1) An officer.

- (2) A senior noncommissioned officer (NCO) (sergeant first class and above).
- (3) A qualified unit motor sergeant.
- c. Vehicles towed have the final drive input shafts disconnected to prevent further damage. Only approved tow bars will be used. Cables or chains will not be used for towing when final drives are disconnected.
  - d. Personnel do not ride on or in a tracked vehicle being towed.
  - e. All M1 family vehicles will be towed using two vehicles (front and rear).

#### 7. OPERATING WHEELED VEHICLES Commanders will ensure:

- a. Trailing escort vehicles are used for convoy operations.
- b. Escort vehicles are equipped with a rotating amber warning light (RAWL). RAWLs will be mounted so the light is visible to approaching and passing vehicles.
- c. Drivers operating vehicles carrying hazardous cargo (fuel or explosives) are briefed on DD Form 836 AE (Special Instructions for Motor Vehicle Drivers) according to USAREUR Regulations 55-1 and 55-4. Completed DD Forms 836 AE and applicable DD and AE Forms in the 55-4 series (Accident Information Sheets) will be given to drivers and maintained as part of the vehicle movement package. Drivers will be instructed to use the information in the package as a checklist in an emergency. This requirement is for convoys and individual vehicles transporting hazardous material.
- d. Headlights, taillights, reflectors, reflecting tape, and delineator plates are wiped clean at each stop.
- e. Convoys moving on highways use the right traffic lane. Hard shoulders (divided by a solid white line) should be used only for emergency stops.
- f. Controls are established to prohibit smoking within 50 feet of vehicles carrying explosives or flammable material.
- g. Gasoline cans are equipped with serviceable gaskets and are marked with the contents in 1" tall letters in a color contrasting the color of the can.
- h. Trailers are towed with safety chains attached to the towing vehicle and that signal and brake lights work.
  - i. Precautions for broken-down vehicles are followed (para 2.s. this Part).
  - j. Road condition standards for inclement weather, UR 385-55, are complied with.
- **8. CONVOY PRE-OPERATION REQUIREMENTS** Before convoy operations, commanders will review the operating standards in USAREUR Regulation 55-1. Commanders of convoy serials and march units must:
- a. Identify hazards along the march route. A physical reconnaissance of the march route is encouraged.
- b. Prepare and distribute convoy strip maps during the pre-mission briefing attended by vehicle crew members.

- c. Ensure at least 5 minutes are allowed between march units and at least 15 minutes are allowed between march serials on the open road.
  - d. Enforce the crew rest standards as stated in this SOP and unit policies/SOPs.
- e. Enforce the senior occupant requirement and ensure that the senior occupant is know-ledgeable of the driver's capabilities.
  - f. Ensure all personnel are aware of and enforce the standards for inclement weather conditions.
- g. All over size, over weight, and track vehicles have a functioning RAWL installed. This includes vehicles that are more than 8'2½" wide or 13'1½" high.

#### 9. CONVOY REQUIREMENTS DURING OPERATIONS

- a. General. Convoy commanders will
  - (1) Ensure the principles of march discipline are observed (FM 55-30, chap 5).
  - (2) Plan for and provide adequate rest periods (para 4 this Part).
  - (3) Plan for HN police assistance to regulate traffic.
  - (4) Instruct drivers to obey police instructions.
- (5) Instruct drivers to assist passing vehicles by slowing down and providing adequate space for passing vehicles to return to the traffic lane.
- (6) Ensure lead vehicles and trail escort vehicles (TEVs) are assigned (USAREUR Reg 55-1).
  - (7) Headlights are turned on to increase visibility.
  - b. Space Between Vehicles.
    - (1) The space between vehicles in an open column march unit will be at least
      - (a) One hundred meters or a 6-second interval on highways.
      - (b) Fifty meters or a 4-second interval on secondary roads (excl congested areas).
- (2) March units will reduce speed and vehicle intervals when approaching congested areas and will proceed under closed column. The space between vehicles may be reduced to 25 meters or to a 2-second interval, whichever is greater, for movement through congested areas. Units will resume prescribed distances ((1)(a) and (b) above) after leaving a congested area.
  - (3) Convoy commanders:
- (a) May order the space between vehicles reduced to permit drivers to see the vehicles in front of them in bad weather or when road conditions are poor.
- (b) Will not reduce the space between vehicles when it would prevent civilian vehicles from safely passing convoys.

- c. Reflective Clothing. Guide personnel, road guards, wrecker operators, and other personnel will use reflective clothing when walking on or near public roads. DA Pamphlet 385-3 provides information on sleeve bands (NSN 8564-00-177-4976) and safety vests (NSN 8415-00-177-4974) that may be worn when walking near public roads.
  - d. Stopping. Military drivers will
    - (1) Stop vehicles off roads and clear of intersections.
    - (2) Ensure spaces in halted convoys are closed.
    - (3) Use caution when resuming movement.
    - (4) Not flash or otherwise signal civilian drivers that it is safe to pass.
- e. Warning Approaching Traffic. Personnel in trailing vehicles will post a guard wearing proper reflective clothing to warn approaching traffic when the convoy stops. These personnel will not direct traffic.
  - f. Convoys Moving Through Intersections.
    - (1) Drivers in military convoys
      - (a) Will follow right-of-way rules for moving through intersections.
- (b) Will not force the right-of-way on other drivers. MILITARY CONVOYS HAVE THE RIGHT-OF-WAY ONLY WHEN OTHER DRIVERS YIELD.
- (c) Must be aware that other drivers are not required to stop when a military convoy is moving through an intersection that has a traffic light.
  - (2) Commanders will ensure convoys stop when other traffic does not yield the right-of-way.
- (3) In the absence of local HN police, military personnel will warn (not regulate or police) approaching civilian traffic of a convoy passing through an intersection. Motor vehicles may be used to warn other motorists but will not block traffic lanes.
- (4) Military personnel will wear reflective clothing to ensure they are visible and recognizable as warning guides. They will not force drivers to stop.
  - g. Convoys Moving Across Railroad Tracks.
- (1) Any convoy movement that will cross any rail system will be briefed in the convoy safety brief.
- (2) Commanders will ensure that all drivers and assistant drivers are familiar with the type of rail system crossing devices in the countries or areas that the convoy will be moving.
- (3) Vehicles will not try to "beat the train", even if this means that the convoy will be split. Appropriate actions will be briefed at the convoy safety briefing. The train always has the right of way.

#### 10. IDENTIFYING CONVOY MARCH COLUMNS

a. Convoy commanders will:

- (1) Identify each march column with convoy flags. Flags should be approximately 30 centimeters high and 45 centimeters wide. Flags are available through supply channels.
- (2) Ensure flags are mounted on the left side of each vehicle. Flags will be placed on the right side of each vehicle when traveling through a country where vehicles drive on the left side of the road.
  - (3) Use leading and trailing escort vehicles.
  - (4) Ensure the lead vehicle of each march unit
- (a) Displays a blue flag (NSN 8345-00-543-6912) and one or two RAWLs. Flag and light rules for The Netherlands are in (9) below.
- (b) Has a sign (black letters on non-glare white background) with the words "Convoy Follows" in English and the languages of the nations traveled through, as follows:
  - 1. "Kolonne Folgt" (German).
  - 2. "Colonne Suit" (French).
  - 3. "Colonne Folgt" (Dutch).
  - 4. "Inizio Colonna" (Italian).
- (5) Ensure the last vehicle of each march unit displays a green flag and a black sign on a non-glare white background. The size of the sign will depend on the size and shape of the rear of the vehicle. The sign will not obscure taillights, directional signals, or signs announcing hazardous materials. Each march unit will have its own TEV because of the distance covered during the operations. TEVs will not transport hazardous material (ammunition; explosives; petroleum, oils, and lubricants (POL)) or carry personnel in the cargo area. The sign will state "Convoy Ahead" in English and the languages of the nations traveled through, as follows:
  - (a) "Kolonne Voraus" (German).
  - (b) "Colonne en Tête" (French).
  - (c) "Colonne Vooraan" (Dutch).
  - (d) "Fine Colonna" (Italian).
- (6) Determine which vehicles, in addition to the lead, middle, and trail vehicles, should turn on RAWLs based on visibility, weather conditions, and convoy spacing. As a minimum the LEV, TEV, and the middle vehicle will have the RAWL turned on.
- (7) Ensure single-vehicle operators do not operate RAWLs unless the vehicles meet the oversize, overweight, or slow-moving criteria in USAREUR Regulation 55-1.
- (8) Ensure tracked vehicles operating alone (with required escort) or in a convoy on public roads in GE are equipped with RAWLs and are marked on the outside corners with reflective tape.
  - (9) Identify convoys operating in or through The Netherlands as follows:
- (a) The lead vehicle will have two blue flags (left and right) and one blue transparent cover on the right headlight. Headlights will be on low beam.

- (b) The last vehicle will have one green flag (right) and one green transparent cover over the right headlight. Headlights will be on low beam.
- (c) Other vehicles will have one blue flag (right) and one blue transparent cover on the right headlight. Headlights will be on low beam.
  - b. Tracked vehicle convoy commanders will ensure:
    - (1) RAWLs are operating on the lead, middle, and trail escort vehicles.
- (2) Each vehicle is equipped with a RAWL, which will be turned on if a vehicle falls out of the convoy. In The Netherlands, RAWLs will be used only when vehicles or loads are wider than 2.5 meters.
  - c. March unit commanders will display a black and white flag (NSN 8345-00-543-6911).
- **11. SENIOR OCCUPANT RESPONSIBILITIES** The senior occupant of an Army motor vehicle is the person in the vehicle (operator or passenger) with the highest rank. Senior occupants will:
  - a. Ensure drivers are properly licensed to drive assigned vehicles.
- b. Ensure drivers do not exceed driving times established by USAREUR Reg 385-55 and this SOP.
- c. Not permit a driver who appears fatigued or physically or mentally impaired to operate a vehicle.
  - d. Ensure vehicle occupants wear available seat belts while the vehicle is moving.
  - e. Ensure the authorized seating capacity of a vehicle is not exceeded.
  - f. Ensure maintenance checks are performed properly.
- g. Ensure required safety devices (incl. RAWLs) are present, clean, and operational according to USAREUR Regulation 55-1.
  - h. Ensure drivers recognize unsafe mechanical conditions on vehicles.
- i. Help drivers back vehicles or execute other difficult maneuvers when an assistant driver is not available.
- j. Ensure the flow of civilian traffic is not interrupted by sudden halts, U-turns, or other hazardous actions (for example, backing on a roadway). When a turnaround is required, the roadway will be clear before the vehicle reenters traffic. Highway warning devices will be displayed properly when the vehicle is stopped on or beside a street, road, or highway. The senior occupant will post personnel and warning triangles to warn approaching traffic when the vehicle has stopped or is broken down.
  - k. Be on the lookout for safety hazards and take prompt corrective action when required.
- I. Obey traffic regulations and unit SOPs. Senior occupants are responsible for ensuring drivers do not jeopardize the safety of others with reckless speed. Drivers will exit highways only at authorized points marked by the exit traffic sign. Drivers will not stop, park, back, or make U-turns on highways unless directed by HN police.

- m. Ensure personnel comply with convoy and march discipline when at a halt. The senior occupant will ensure personnel:
  - (1) Are not closer than 25 feet from passing traffic.
- (2) Accomplish needed preventive maintenance checks and services, including cleaning reflective surfaces.
  - (3) Smoke not closer than 50 feet from vehicles.
  - (4) Rest as time permits.
  - n. Ensure tire chains are used when needed.
  - o. Ensure drivers keep the proper space between vehicles when in convoy.
- p. Ensure the driver's field of vision is not obstructed by ice, snow, dirt, or other items. Senior occupants must be especially watchful when visibility is limited.
  - q. Adhere strictly to antenna tie-down requirements.
- r. Ensure vehicle wheel chock blocks are placed to the front and rear of vehicle rear tires when the vehicle is parked uphill or downhill.
- s. The senior occupant has the responsibility to ensure that the driver adheres to the speed limits in USAREUR Reg 385-55 and this SOP.

#### 12. VEHICLE OPERATIONS IN MAINTENANCE AREAS

- a. The maximum speed in motorpools, maintenance areas, field sites, and wash racks is 5 mph.
- b. Only properly licensed drivers will start or operate vehicles.
- c. Drivers will
  - (1) Not leave a vehicle unattended while the engine is running.
- (2) Use the rear safety strap when transporting personnel in vehicle cargo beds. Riders in cargo beds will stay seated while the vehicle is moving.
  - (3) Use ground guides when moving a vehicle in a motorpool.
  - d. Ground guides will
    - (1) Not run when guiding vehicles.
    - (2) Work in pairs when backing vehicles.
    - (3) Always be visible to the driver.
    - (4) Know proper arm and hand signals.
    - (5) Not stand between a moving vehicle and any object.
  - e. Personnel riding in tracked vehicles will

- (1) Wear head protection.
- (2) Not sit on top of vehicles.
- (3) Use installed seat belts.

### PART XIV POL SAFETY PROGRAM

#### 1. GENERAL Commanders will:

- a. Enforce standards, develop procedures, and set responsibilities for handling hazardous cargo forms, attaching vehicle placards, and taking emergency actions (USAREUR Reg 55-4, Draft).
- b. Implement a training program for personnel involved in refueling operations. This training should include information on:
- (1) Appropriate spacing between refueling and storage points and between refueling points and pumps, according to spacing standards in field and technical manuals for the pumps and tanker units being used.
  - (2) Reporting fuel spills on U.S. installations to the local director of public works (DPW).
- (3) Notifying the local HN fire brigade and the nearest U.S. military community DPW when fuel spills occur off U.S. installations.
  - (4) Establishing a POL servicing point.
  - (5) Using a receptacle (a 5-gallon can that is emptied daily) for the nozzle.
- (6) Establishing a grounding system. A grounding rod (NSN 5975-00-224-5260 or 5975-00-404-2684) and a grounding wire (NSN 2590-00-792-8621) may be used.
  - c. Ensure fire extinguishers are used as follows:
- (1) A minimum of one 50-pound dry chemical extinguisher is available at each tank and pump unit.
  - (2) One 15-pound dry chemical extinguisher is at each nozzle point.

#### d. Ensure

- (1) Filters, hose joints, hoses, nozzles, pumps, and tanks are inspected daily.
- (2) Hazards are marked with reflective tape during night operations.
- (3) Personnel operating fuel points wear chemical goggles, coveralls, and rubber gloves during operations.
  - (4) Explosion-proof lights are used during night operations.
- (5) Operators shut down fueling operations immediately when potential hazards (for example, spills, leaks, and lack of fire extinguishers) are recognized.

- (6) Refueling tankers are not parked closer than 15 feet bumper-to-bumper or side-to-side in motor parks.
  - e. Place signs that read as follows at least 50 feet from refueling points and fuel tanks:

FLAMMABLE (6-inch letters)
NO SMOKING WITHIN 50 FEET (3-inch letters)

- f. Mark the fuel type (motor gasoline, JP8, or other) clearly at fuel points.
- g. Discontinue fueling operations when there are thunderstorms within 5 miles of a site.
- h. Ensure a written fire plan is available on site. The fire plan will explain:
  - (1) Handling fuel spills.
  - (2) Placement of fire extinguishers.
  - (3) Assigning personnel.
  - (4) Conducting fire drills, including hands-on fire extinguisher training.
  - (5) Controlling fuel.
  - (6) Evacuation routes.

### 2. REFUELING PROCEDURES

- a. All POL operators will be trained IAW FMs 10-67-1, 10-277, MIL-HDBK-200E, and MIL-HDBK-201B.
- b. Drivers will move their vehicles to refueling points, shut down the vehicles, and turn off radios. Drivers and all passengers will get out of the vehicles.
  - c. Fuel tank operators will:
- (1) Not wear nylon outer or under clothing or LBE during the actual refueling operations. Once refueling operations have been completed, LBE may be worn.
  - (2) Use chemical goggles, protective uniforms, and rubber gloves.
  - (3) Position fire extinguishers near refueling point.
- (4) Electrically ground fuel tankers. Operators will bond the nozzle to the vehicle being refueled using a bonding cable or by touching the end of the nozzle to the filler neck.
- (5) Squeeze the nozzle to stop pressure surges. Nozzles will not be notched to keep them open.
  - (6) Stand by the nozzle at all times.
  - (7) Release fuel tanker electrical grounding points.
  - (8) Release the bond ((4) above).

- (9) Not park closer than 15 feet of another vehicle during fuel issue or receipt operations.
- (10) Position drip pan under filler neck area prior to dispensing and remove after refueling.

#### 3. POL SUPPLY POINT REQUIREMENTS Commanders will ensure:

- a. A checkpoint is established to extinguish smoking materials.
- b. Self-closing metal containers are used to dispose of rubbish, rags, and oily waste.
- c. Hot work is coordinated with the fire department. Mechanical or friction sparks are dangerous when produced near POL.
  - d. Bonding and grounding systems are inspected daily.
  - e. Drip pans are used for hose joints and tanker hookup points.
- f. Spills are cleaned up at once and disposed of IAW SECTION X ENVIRONMENTAL/HAZARDOUS MATERIAL MANAGEMENT PROGRAM.
  - g. The fire department reports to the site for a wash down when ecologically permissible.
  - h. Containers are inspected before filling and are marked with the type of fuel being stored.
  - i. Fuel is not used for cleaning.
  - j. Personnel know fire fighting and evacuation procedures and how to use fire extinguishers.
  - k. That spill kits are available on site.

#### 4. PARKING OF FUEL TRUCKS AND FUEL PODS IN MOTOR POOLS

- a. There are few references in Europe that provide guidance for commanders in parking fuel trucks and fuel pods safety in their motor pool operations. The purpose of this paragraph is to provide guidance to commanders for parking fuel trucks and fuel pods in a safe manner.
- b. For certain installations the guidance of this paragraph may be altered at the discretion of the commander in order to meet the units mission requirements. The commander must consider special features such as mission, security, topographical conditions barricades, adequacy of exits, proximity to building, public property, and type of equipment being parked in the same compound.
- c. In order to store fuel with a minimal amount of risk, one must understand what the characteristics and precautionary measures are to prevent accidents. Most serious accidents occur as a result from ignition of combustible vapor formations and air mixtures. When vapors from fuel or POL products are mixed with proper amounts of air, they form an explosive mixture which, when subjected to a spark not confined, the hot gases can expand, resulting in a fire. So the key to safe storing of fuel is to control vapor formations and ignition sources.
- d. There are five areas that the commander must consider for parking fuel trucks and fuel pods in a motor pool area:
  - (1) Fire prevention and control.
  - (2) Environmental protection of the area.

- (3) Precautions for controlling vapor formations.
- (4) Precautions for controlling ignition sources.
- (5) Emergency egress and access to vehicles
- e. Commanders must consider fire prevention in their motor pool areas before parking fuel trucks and fuel pods. A risk assessment of the motor pool area, (physical layout) will help determine how many vehicles and pods commanders can safely place in their motor pool. Areas that will have an impact on placements are; buildings location, potential ignition sources, areas where vapor might build up, compatible storage of other equipment, and the environment.
- f. Protection of the environment plays an important part in motor pool operations. Contamination of water/ground from POL spills can be extremely costly in clean up cost. Before commanders may park vehicles in their motor pool, they must know the Host Nation requirements (Laws), for storage of fuel.
- g. Vapor control is critical in fire prevention. Vapors usually come from careless handling and storage of POL products. The formation of vapors is extremely hazardous because all POL products give off varying degrees of vapors at different temperature ranges and flash points. The lower the flash point, the more dangerous fumes become at lower temperatures. POL vapors are heavier than air and consequently will seek low areas and follow air currents for great distances from the source. Vapors will tend to stay concentrated in one location when there is very little air movement.
- h. Control of ignition sources must be taken to prevent the ignition of flammable vapors, lighting, cutting and welding, hot surfaces, frictional heat, static, electrical, and mechanical sparks, spontaneous ignition, including heat-producing chemical reactions and radiant heat. Almost all of these ignition sources can be found in a working motor pool. Therefore, these sources must be removed or sufficiently barricaded, separated/protected from fuel storage areas or done in an area away from fuel storage. Operations that include the use of tools or machines that may act as ignition sources must be sufficiently separated from fuel storage areas.
- i. Ground all POL vehicles to prevent ignition from possible lightning and the more common problem of static discharge. The following steps should be taken:
  - (1) Clean the rod to remove all grease, oil or paint.
  - (2) Dig a hole at least 6 inches deep and 18 inches across.
- (3) Drive the rod through to the subsoil, 6 feet or more. Leave about 3 inches above the bottom of the hole. If you are using the Ground Rod Assembly NSN 5975-00-878-3791, attach the Drive-head Stud, NSN 5950-00-924-9927.
- (4) Connect the truck, Pod and Trailer to the rod with the shortest and straightest practical length of ground strap or heavy gauge wire, #6 AWG or larger, and preferably copper to, to a terminal screw or clamp.
  - (5) Fill the hole with water and let it soak in, then fill the hole with soil.
  - (6) Check the strap or wire connections every day and keep them clean and tight.
  - (7) Do not use a fence or fence post as a ground.
  - j. Annex H has the following checklists:

- (1) Petroleum Safety Precautions.
- (2) Precautions for Controlling Ignition Sources.
- (3) Precautions for Controlling Vapor Formation.

### PART XV RAIL OPERATIONS

#### 1. PRE-OPERATION REQUIREMENTS

- a. Commanders. Before beginning rail loading operations, commanders will ensure:
- (1) Personnel conduct risk management of the railhead site, considering common risk factors (USAREUR Reg 55-8).
- (2) Soldiers are briefed and instructed on the safety standards and procedures in USAREUR Regulation 55-8, section III and this section of this SOP.
- (3) Safety equipment (for example, reflective vests, flashlights, hard-hats for safety) and supervisory personnel and ground guides are available.
  - (4) Medical support is available at loading and unloading sites.
  - (5) Unit safety personnel are at site. Commanders will monitor safety standards.
- (6) Overhead high voltage lines are de-energized shut off during loading by coordination with the yardmaster.
  - (7) Soldiers are shown the location of high voltage lines.
- b. Train Commanders. Train commanders will ensure the following requirements have been met before rail loading or unloading:
  - (1) Military units and organization personnel have been:
    - (a) Briefed on regulatory requirements before each rail movement.
    - (b) Made aware of unsafe conditions in the railhead area.
- (c) Directed to keep a safe distance from electric powerlines and systems in the work area.
  - (2) Supervisors will insure that:
- (a) When powerlines are switched on temporarily for technical reasons, ensure the following:
  - 1. Operations will cease.
  - 2. The area will be cleared of personnel.
- 3. Operations will not resume until the appropriate railway authority (rail master) (Deutsche Bundesbahn in GE) confirms that electricity has been shut off and grounded in the railhead area.

(b) While supplies are moved, escorts may not ride in freight cars or vehicles loaded on rail cars.

# NOTE: Electrified rail systems with overhead powerlines and feeder lines installed beside rail tracks carry 15,000 volts or more.

- c. Transportation Officers or Representatives. The Transportation Officer or Representative will normally:
- (1) Coordinate with the responsible railway official and confirm that electric overhead powerlines have been shut off and grounded in the railhead work area. **Under no circumstances will operations start until confirmation is received.** 
  - (2) Keep units informed of changing conditions.
  - (3) Enforce the rules of conduct for ensuring safe operations.
- (4) Make soldiers aware of warning signs posted in the local work area and affixed to railway equipment. Equipment with steps or stepladders extending higher than 2 meters above the rail surface will be avoided.

#### d. Personnel will:

- (1) Wear Kevlar helmets or industrial hard-hats.
- (2) Be equipped with reflective vests and flashlights during darkness.
- (3) Not work or walk on top of rail-loaded vehicles without specific permission from the officer in charge (OIC) or noncommissioned officer in charge (NCOIC). Only the OIC or NCOIC may declare an area safe from electric hazards.
- (4) Be informed that the local transportation representative in charge of rail uploading or downloading is the only person authorized to inform the HN supervisor when rail cars may be moved. The transportation representative will be the only person wearing a white armband.
- e. Vehicle operators will remove whip antennas from vehicles before entering a rail-loading site. Antennas will not be remounted until vehicles are in the staging area away from electric hazards.

### 2. LOADING AND UNLOADING PROCEDURES

- a. The OIC or NCOIC will ensure:
- (1) Support legs have been lowered and tailgates and side braces are removed (if necessary) before loading or unloading operations.
  - (2) Trash has been cleared from the area before the train leaves.
- (3) Rail cars are inspected before loading to ensure ice, snow, and dunnage has been removed.
- b. Ground guides will be used when moving vehicles in staging areas. Ground guides will use hand and arm signals (with flashlights after dark); not run or walk backwards or place themselves in a dangerous position between two vehicles. USAREUR Regulation 385-55 provides ground guide requirements for various types of vehicles.

- c. Train commanders will lock the tracks and control the keys.
- d. Compressed gas cylinders will be secured in upright positions with safety caps on and separated from flammables (for example, POL, fuel blends).
- e. The HN railhead wagon master must tie down and check equipment with traversing tubes or booms.
- f. Commanders will ensure personnel working at rail-heads are briefed on the following procedures. Personnel will not:
- (1) Be on the same rail car as a moving vehicle. The only exception is when a second or third vehicle is being placed on a rail car capable of carrying two or three vehicles. The second or third vehicle will move forward only after the first vehicle has completely stopped. The ground guide will stand to the side of the vehicle in front of the vehicle he is guiding and not between vehicles.
- (2) Ride in or climb on tanks, vehicles, and other equipment being transported by rail after the vehicles and equipment have been locked.
  - (3) Enter equipment during stops.
  - g. Secure vehicles with chock blocks and bracing locking the sides. Commanders must ensure:
    - (1) Vehicles are properly secured.
    - (2) Gun barrels are locked and secured (confirmation by the OIC in the consignment note).
- (3) Rail cars are returned well swept (after unloading) and nails and wire remnants are removed completely.

### 3. PHYSICAL SECURITY AND SAFETY STANDARDS DURING RAIL OPERATIONS

- a. Commanders have the overall responsibility for ensuring that all government property shipped by commercial or unit transportation is properly secured and adequate security measures are in place to prevent theft before, during and after shipment IAW references above.
- b. Deployment of guard force personnel during unscheduled stops is a high risk operation. Risks must be reassessed at each stop. Forces should be deployed only after considering security requirements, length of delay, and risks to soldiers.
  - c. Responsibilities for rail shipment:
- (1) The OIC/NCOIC in charge of the shipment must be in the rank of SGT/E-5 or above and is responsible for the overall security of the cargo being shipped. OIC/NCOIC must ensure that all personnel providing security have been briefed on safety standards as well as use of force. The NCOIC/OIC will read this section to all personnel riding the train.
  - (2) The engineer of the train is solely responsible for his train, not the security of the cargo.
  - (3) OIC/NCOIC will ensure that only the security detail dismounts.
  - d. Personnel performing guard duties for rail shipments will adhere to the following guidelines:

- (1) They are aware that the overhead rail power lines contain approximately 15,000 volts of electricity. Contact, or even being in close proximity, with these lines is fatal.
- (2) Must never climb on top of rail cars or equipment such as Abrams tank systems that are loaded on rail cars when power lines are overhead.
- (3) If there are multiple tracks, soldiers are aware of the possibility of other rail traffic passing by while they are on the ground guarding their shipment.
- (4) Express trains can travel in excess of 100 miles per hour/160 Kmph and may create a vacuum strong enough to pull a person under the wheels. If necessary, guards will place their back firmly against the shipment if an express train is passing them while they are guarding the shipment.
- (5) If the shipment is stopped for a period of time neighboring an express train track, guards will monitor the shipment from one side of the train only or if that is not possible, from the windows of the car in which they are riding.
  - (6) Must be aware of the dangers of slow moving trains and coasting trains.
- (a) Use caution when crossing tracks, or between rail cars. Slow moving trains are less noisy and do not cause the vibrations of express trains, but the danger is no less significant.
- (b) In most rail yards, cars are moved from one track to another by pushing the cars up a ramp and letting them coast down the other side through remotely controlled switch, and on to the proper track.
- (7) Never step directly into or on a switch. An operator as far as 10 kilometers away remotely controls most rail switches, therefore, making the switch unpredictable and hazardous. Heavy wire cables that run along the ground at heights varying from 10-24 inches of the ground move these switches. Guards need to be aware of the cables to avoid tripping over them.
- (8) Due to lack of clearance space between trains and objects common to railways, (overpasses, bridge trestles, signs, etc.) personnel will not lean out of windows unless the train is stopped, and then only if it is necessary to observe the shipment.
  - (9) Do not open doors while the train is in motion.
- (10) During halts, the OIC/NCOIC will notify the train engineer that members of his unit have exited the train and ask that he contact him before moving. Personnel will maintain constant surveillance of the railcars. Guards will wear a reflectorized vest when physically performing guard duties.
- (11) If the train is stopped for a few minutes or for some unscheduled reason, make attempts to maintain surveillance of the shipment from windows on opposite sides of the cars unless specifically directed otherwise by the OIC/NCOIC after he/she has coordinated with the engineer.
- (12) If for some reason the train starts moving and an individual is still on the ground and has not returned to the train, that individual will not attempt to run and catch up with the train. The OIC/NCOIC will notify his/her unit and the individual will be picked up and will follow with the next available transportation.

### PART XVI AVIATION SAFETY PROGRAM

- 1. INTRODUCTION: This section establishes the 1 AD aviation accident prevention program for all aviation units assigned or attached to 1 AD. It outlines personnel responsibilities and provides implementation instructions, goals and methods this command will use to monitor the success of the aviation safety program. Commanders will not waive any safety requirements set forth in Army regulations except as approved under the waiver and delegation of authority provisions of the affected regulation. This section is written in a different format to focus on aviation.
- **2. POLICY** Accident prevention in Army aviation is based upon the philosophy that all accidents can be prevented and that accident prevention is an inherent leadership function. This does not relieve any individual of the responsibility to perform their functions in accordance with appropriate Army guidance and doctrine. The commander, aviator, crewchief, mechanic, and all other members of the aviation team must be aware of sound accident prevention principles and apply them during their daily activities.
- **3. RESPONSIBILITIES** The commander has overall responsibility for the aviation accident prevention program. The unit Aviation Safety Officer (ASO) advises the commander on all safety matters and manages the unit accident prevention program. Fulfillment of individual responsibilities requires the complete cooperation of all members of this command, and familiarity

with the contents of this and other applicable regulations, unit SOPs and specific job related publications and procedures. Specific individual responsibilities are discussed in AR 385-95.

- **4. PROCEDURES** The following are key elements of the accident prevention program. These procedures are independent functions, yet when integrated together, they provide the foundation for an effective accident prevention program. These functions are mandatory at the command levels indicated in this regulation.
- a. COMMANDER'S SAFETY PHILOSOPHY. Each commander, down to the company or detachment level, will have a written policy that outlines his/her overall safety philosophy.
- (1) GOAL. The purpose of this written philosophy is to establish the general safety guidelines and standards to which all unit personnel will adhere during the conduct of both ground and aviation operations.
- (2) STANDARD. All unit personnel will be thoroughly familiar with all elements of the safety philosophy.
- (3) CONTROL. Commanders will ensure that the guidance and directives established in the written philosophy are understood and followed.
- b. AVIATION SAFETY COUNCIL. Each aviation organization, down to the battalion level, will form an Aviation Safety Council IAW AR 385-95. Aviation Safety Councils for units organized under the Army of Excellence (J or L series) TOEs, below the battalion level are optional, however, the unit must be represented on a consolidated council at the next higher command level. Units detached/deployed for greater than 90 days will conduct Aviation Safety Councils at detached level or be represented on a council board at higher level within the deployed area of operation.
- (1) GOAL. The purpose of the Aviation Safety Council is to promote aviation safety awareness through the exchange of ideas, discussion, reporting of known hazards or deficiencies, and the development of policies, procedures, and countermeasures designed to eliminate existing or potential hazards.

- (2) STANDARD. The council will meet at least quarterly. Membership and duties of the council are outlined in AR 385-95.
- (3) CONTROL. Council minutes will be reviewed and approved by the council president and posted on unit safety bulletin boards. Members of the command will report to the safety council or unit safety officer on the status of suspended actions as established by the council. Copies of unit safety council minutes should be consolidated and forwarded to the next higher headquarters up to the Corps level, for review and assistance in completing corrective actions.
- c. ENLISTED SAFETY COUNCIL. Each aviation organization, down to the battalion level, will form an Enlisted Safety Council IAW AR 385-95. Enlisted Safety Councils for units organized under the Army of Excellence (J or L series-s) TOEs, below the battalion level are optional, however, the unit must be represented on a consolidated council at the next higher command level.
- (1) GOAL. The primary purpose of the Enlisted Safety Council is to promote aviation safety awareness through the exchange of ideas, discussion, reporting of known hazards or deficiencies, and the development of policies, procedures, and countermeasures designed to eliminate existing or potential hazards.
- (2) STANDARD. The council will meet at least quarterly. Membership and duties of the council are outlined in AR 385-95.
- (3) CONTROL. Council minutes will be reviewed and approved by the council president and posted on unit safety bulletin boards. Members of the command will report to the safety council or unit safety NCO on the status of suspended actions as established by the council. Copies of unit safety council minutes should be consolidated and forwarded to the next higher headquarters up to the Corps level, for review and assistance in completing corrective actions.
- d. AVIATION SAFETY MEETINGS. Units will conduct monthly aviation safety meetings for all air crewmembers and support personnel IAW AR 385-95.
- (1) GOAL. The objective of monthly safety meetings is to educate and to increase the level of awareness of unit personnel as to the hazards associated with aviation operations.
- (2) STANDARD. Unit Safety meetings will be scheduled by the unit ASO and attendance by all air crewmembers is mandatory. Additional requirements are found in AR 385-95.
- (3) CONTROL. Unit ASOs will maintain attendance rosters and conduct makeup training for those personnel who miss the regularly scheduled meetings.
- e. AVIATION ACCIDENT PREVENTION SURVEYS. ASOs will conduct accident prevention surveys of the unit's areas of responsibility IAW AR 385-95.
- (1) GOAL. The early detection of system defects and potential hazards that could cause or contribute to a mishap.

### (2) STANDARDS.

(a) The unit ASO will conduct aviation accident prevention surveys on a semi-annual basis as a minimum. More frequent surveys may be performed at the discretion of the unit commander. Limited use helicopter landing sites (LUHLS) will be surveyed prior to initial use and then annually thereafter. If the sites are used less than once per quarter, surveys are required within two weeks of use.

- (b) The ASO will review deficiencies, assign a risk assessment code (RAC), and record each deficiency IAW AR 385-10 based on information obtained during the surveys. Deficiencies will be corrected on a worst-first basis. RAC 1 and 2 deficiencies that cannot be corrected within 30 days will be elevated to the next higher level of command for immediate assistance.
- (c) Field site or forward deployed location The ASO will conduct and record a safety survey of the unit area after arrival at field site or forward deployed location as soon as practical. As a minimum, surveys will include the bivouac site location with emphasis on vehicle movement and dismount points, aircraft hover/taxi, landing/takeoff, and parking areas, POL operations, aircraft rearming and ammunition storage operations, field dining facilities, flight following and accident notification procedures.

### (3) CONTROL.

- (a) Supervisors will indicate corrective actions for all of the operating errors and system defects noted during the surveys. Reports of completed corrections will then be forwarded to the ASO within the suspense established by the unit commander.
- (b) Deficiencies that cannot be corrected at the unit level will be forwarded to the safety council of the next higher headquarters for disposition with a recommended course of action.
- (c) The ASO will monitor the status of corrective actions and keep the commander informed.
- f. PRE-ACCIDENT PLAN. Commanders of all V Corps aviation units are responsible for developing an effective plan of action to be used in case of an aircraft mishap for both garrison and field environments. The purpose of the plan is to prevent further injury or loss of life, unnecessary damage to property, confusion at the mishap site, and to assist in the implementation of the required immediate notification procedures listed in paragraph h, Aircraft Mishap Investigation and Reporting.
- (1) GOAL. Minimize injury or prevent loss of life, control and reduce post crash property and environmental damage, and initiate accident notification procedures should a mishap occur.

#### (2) STANDARDS.

- (a) Each attended airfield and heliport will maintain a current pre-accident plan IAW AR 385-95.
  - (b) Each unit will have a garrison pre-accident plan.
- (c) Each unit will develop a pre-accident plan for each field exercise and tactical/gunnery exercise.

### (3) CONTROL.

- (a) The pre-accident plan will be submitted to the unit commander for approval.
- (b) The Operations Officer will monitor the Pre-accident plan and ensure it is updated as required.
- (c) All airfield pre-accident plans will be rehearsed/tested as a minimum on quarterly basis IAW FM 1-300 and AR 385-95.. Airfield Operations will maintain a record of exercise performance.

- (d) All unit garrison pre-accident plans will be tested monthly to ensure contact phone numbers are current. Key individuals should be questioned by the ASO to ensure they understand their responsibilities. Record of the tests must be maintained.
- (e) All exercise/gunnery pre-accident plans will be exercised during the first day of the exercise/gunnery.
- g. AIRCRAFT MISHAP INVESTIGATION AND REPORTING. 1 AD aviation units must be capable of reacting to aircraft mishaps in an organized and timely manner to prevent confusion at the mishap site and to preclude the loss of evidence for the subsequent investigation.
- (1) GOAL. To investigate and report aircraft mishaps accurately and in a timely manner so that lessons learned through the investigation may be utilized to prevent the recurrence of similar accidents.

### (2) STANDARDS.

- (a) Follow the immediate actions and initial notification procedures outlined in Part VII, this SOP for all Class A, B, and C Mishaps.
- (b) Follow the preliminary actions and reporting procedures outlined in Part VII, this SOP for Class D, E, and FOD Mishaps, NOTE Notification procedures in Part VII do not eliminate the need for additional required notifications (e g , OPREP-3 or a Serious Incident Report, if necessary).
- (c) Conduct Aircraft Mishap Investigation Boards, involving Class A, B, or C, IAW AR 385-40, DA PAM 385-40, and Part VII of this SOP. Distribute aircraft accident reports IAW AR 385-40.
- (d) A medical examination by a flight surgeon for all crewmembers involved in a Class A, B, or C, mishap is required to determine fitness for duty. Medical examination for crewmembers involved in a Class D or E mishap may be conducted at the commander's discretion. For specific information see Part VII of this SOP.
- (e) A collateral investigation is required for all Class A aircraft mishaps. Details concerning relationship/restrictions of safety investigation to a collateral investigations are contained in para 1-8, AR 385-40. See Part VII, 7, this SOP for additional information concerning 1 AD policy.
- h. AWARDS. Commanders at all levels will participate in Aviation Mishap Prevention Awards Programs outlined in AR 672-74, AR 385-10, and Part VIII, this SOP.
- (1) GOAL. To recognize outstanding unit and individual achievement in the areas of aviation safety and accident prevention
- (2) STANDARDS. Unit award programs will be IAW, but not limited to, those outlined in AR 672-74, AR 385-10, and Part VIII, this SOP.
- (3) CONTROL. The V Corps Safety office will review and process requests for unit safety awards specified in AR 672-74.
- i. SAFETY AWARENESS DAYS. All units within 1 AD will conduct semi-annual Safety Awareness Day activities.

- (1) GOAL. On designated 'Safety Awareness Days', the unit will stand down for all non-essential missions to devote the entire day to safety classes, demonstrations, and activities. The purpose of a safety awareness day is to increase overall safety awareness within a unit and to provide commanders with an uninterrupted day of safety education.
- (2) STANDARD. Aviation units down to battalion level will implement creative, well-targeted schedule of events.
- (3) CONTROL. LOIs/programs for organizational safety days will be furnished to the 1 AD Safety office for review and retention.